

NOVEMBER 1966 — 50¢

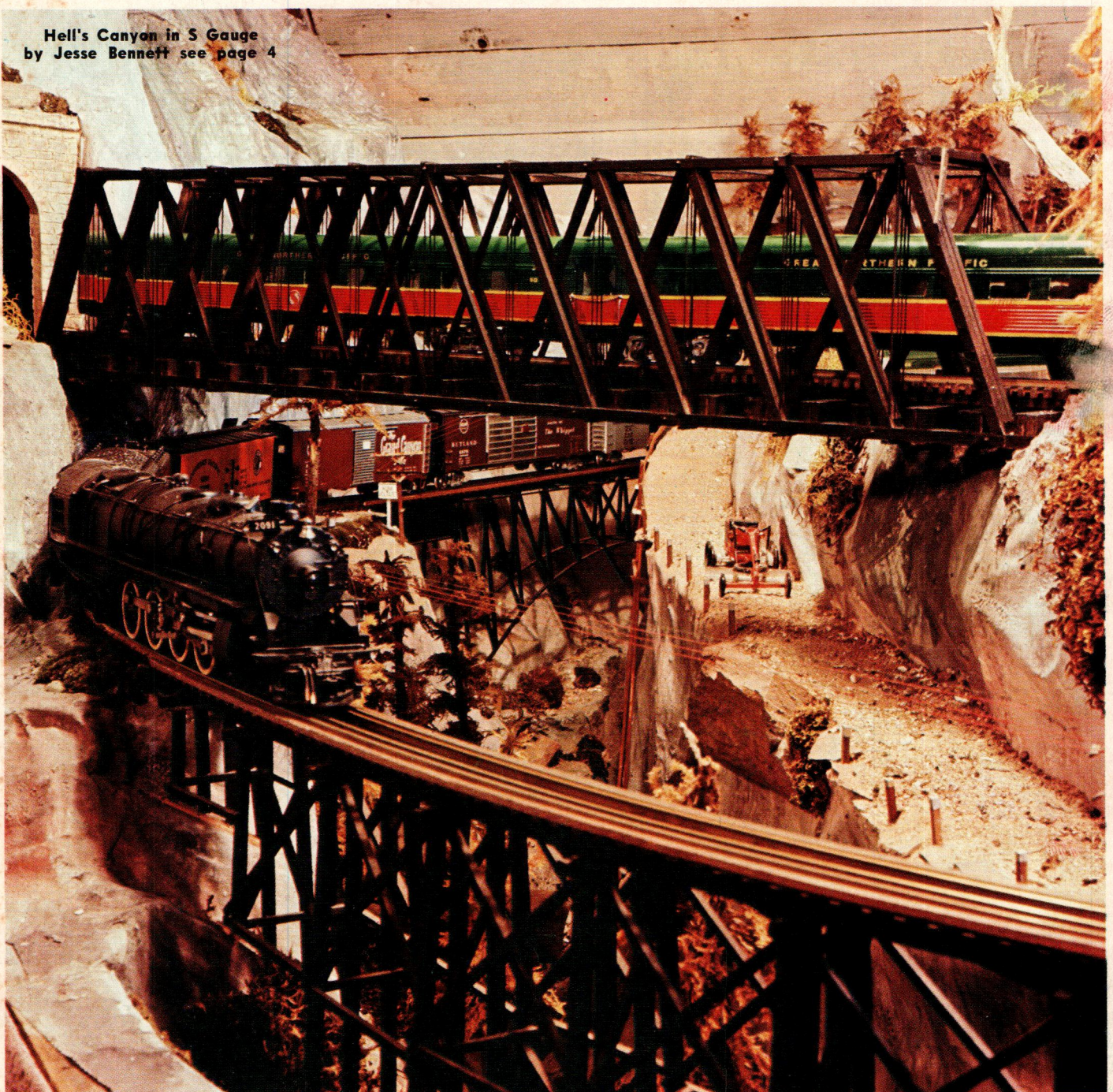
RAILROAD MODEL

C R A F T S M A N

**NYO&W
Y-2 4-8-2**

**LOCOS YOU
CAN'T BUY**

Hell's Canyon in S Gauge
by Jesse Bennett see page 4



GP-40 · NW-3 · NARROW GAUGE · FACTORY

BLUM'S HOBBY HOUSE INC.

800 HURON RD.
Cleveland 15, Ohio

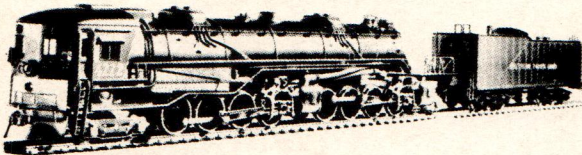
Most Everything for the Model Railroader

"IF IT'S AVAILABLE WE
HAVE IT, OR CAN GET IT"

Choose from Our World Famous Train Selection
One of the Nation's Largest Year 'Round Stocks

UNHEARD of SAVINGS on FINE LOCOMOTIVES

Quantities Limited



South. Pacific 4-8-8-2 Cab Forward,	\$29.77
Norfolk & Western 2-8-8-2 Y6B,	26.66
Nickel Plate 2-8-4 Berkshire,	18.88
General Electric U25C,	12.88
Ind. Harbor Belt 0-8-0	13.88
NYC J3a Hudson	22.77
UP 4-8-8-4 Big Boy	37.77
EMD E-8 Diesel	11.88

(Road Names May Be Substituted)

ATHEARN GP-35



All eight wheels powered. New
POWER-FUL motor and gear boxes.
Excellent detailing. **\$11.88**

R.T.R.

VARNEY



All metal S.D.A. Kits
Gear Drive. Pre-painted,
lighted.
SW 7 Diesel...\$7.88
4-6-0 10-wheeler \$14.88
2-8-0 Consolidation 17.88

TYCO KITS

Pacific, Mikado or
General...12.88
Shifter...9.88
Booster...6.98
Big Six...8.25

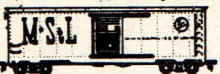


NEW EMD SD45 by ATHEARN

12-wheel gear drive. Excep
tional detailing...**\$13.77**

Ready To Run Cars

ATHEARN, TYCO, VARNEY,
AHM, LIONEL, many others.



Asst. reefers, box cars, flat
cars, gondolas, tank cars, ca-
booses. Our choice of roads.

99c 12 for
\$10.88

CORK ROADBED



HO RAIL Code 100



24/499



10-in-1 Miniature Machine Shop
Complete home workshop. Converts to 10 dif-
ferent tools for all hobby uses. 16" long
Unimat. **\$139.50**

Your ORDER MAILED the SAME DAY RECEIVED!
GUARANTEED FAST, SAFE DELIVERY — ANYWHERE

Have: ☐ HO Ready-to-Run ☐ I want Reference Cat.
☐ American Flyer ☐ '66 Lionel price folder 10c
☐ HO Scale ☐ '66 American Flyer folder 10c
☐ Lionel O ☐ Pac. Fast Mail Cat. 50c NEW
☐ Lionel 027 ☐ LMB Mod. Illus. Cir. 10c or SAE
☐ O Scale ☐ HO CATALOG \$1.00
We Ship Anywhere in the World ☐ New '66 O SCALE folder 25c

Postage and insurance—75c on HO, \$1.00 on Lionel and AF
\$1.75 on Lionel and Flyer orders over \$20.00 Brass Locos Prepaid

Minimum Order on 3 ft. Track Sections—6
secs. Track Postage \$1.75 west of Mississippi

☐ Check ☐ Money Order

outside USA
Add 10% Total
for postage
MINIMUM ORDER \$3.00

LIONEL



2322 Va. Trnmaster Diesel, horn, hdltte. Magna-tract n. 2 Motors, reg. \$65	49.95
145 Automatic gate man, reg. \$7	4.77
128 Operating News Stand, reg. \$10	7.77
943 Exploding Ammo. Dump, reg. \$2	1.39
6175 Rocket Carrying Car, reg. \$6	3.99
6264 Lumber Car, reg. \$6.00	2.49
6650 Missile Launching Car, reg. \$8	5.44
6807-10 Military Flat Car, reg. \$6	2.97
6819 Helicopter Car, reg. \$6	2.99
1044 90 watt transformer, reg. \$15	10.99
224 Twin Diesel Units USN, reg. \$25	18.77
54 Ballest Tamper Car, reg. \$15	5.88
6805 Atomic Energy Car, reg. \$7	2.59
6812 Track Maintenance Car, reg. \$6	2.44
6844 Missile Carrying Car, reg. \$6	3.19
2359 B & M GP9 w/horn, reg. \$40	29.95
2383 ATSF, AA Units, 2 Motors, reg. \$65	49.95
773 Semi-scale Hudson loco and tender w/s and wh., reg. \$90	71.50
736 Berkshire, s & wh., reg. \$50	37.50
35 Watt Transformer, reg. \$6	3.79
LW, 125 W Transformer, reg. \$20	14.88
3362 Operating milk car, reg. \$15	11.77
6164-735 New Haven Box Car, reg. \$6	4.29
6361 Timber transport car, reg. \$6	4.44
6315 Chemical Tank Car, reg. \$6	4.44
6437 Illuminated Caboose, reg. \$6	3.59
6436 Lehigh Valley Hopper, reg. \$5	3.88
3330 Operating Submarine Car, reg. \$9	3.99
6119 Work & boom car, reg. \$3.50	1.88
6416 Boat Transport car, reg. \$7	3.99
6500 Aircraft Transp't car, reg. \$6	1.49
6448 Exploding Box Car, reg. \$6	3.49
120 Super O crossing, 90 deg., reg. \$7	4.19
1047 Switchman w/flag, reg. \$7	4.19
6464-250 WP Box Car	5.95 4.88
6464-375 CtGa Box Car	5.95 4.88
6464-450 GN Box Car	5.95 4.88
6464-595 M&ST L Box Car	5.95 4.88
6464-650 RGD Box Car	5.95 4.88
6464-475 B&M Box Car	5.95 4.88
6464-700 AT&SF Box Car	5.95 4.88
6464-900 NYC Box Car	5.95 4.88
6560-Operating Crane Cr.	8.00 6.79

0 SCALE LOCOS

SP 4-8-4 Daylite	229.50
UP 4-8-2	210.00
UP 2-8-0	162.00
SP 4-8-0	160.00
UP 4-8-8-4	360.00
C&O 2-8-2	198.00
UP 2-10-2	216.00
CB&Q 4-8-4	218.00
PRR DD1 Electric	169.95

0 SCALE CUSTOM LOCOS

Pearce Tool 0-8-0	115.00
All Nation 4-6-0	100.00
All Nation 4-4-2	85.00
Kemtron NYC 4-8-4	188.00
Lobough 0-6-0	145.00
All Nation 1000 hp Dual Power	39.95
All Nation 1000 hp Single power	29.95

HO Catalog

Fabulous Reference Guide! De-
scribes and pictures all wanted in-
tems. Kits, Ready to Run, Imports
—everything in HO at Hobby House.
Fantastic, complete selection
low, low prices. Get your personal
copy today...1.00

Big Lionel Bargains

'66 Super Prices. Huge
selection. Unique items.
Every available extra.
SUPER O
Nation's largest Lionel
O GAUGE
stock. Low prices. Bar-
gain Circular 10c

"O" Gaugers New Sale

Brand New Folder custom locos,
cars, kits, trk., etc., 1000 items 25c

1/2 PRICE SALE KMT KITS

for Lionel O & O27 & O Scale
ENTIRE MANUFACTURER'S STOCK
Factory Closeout—Quantities Limited
FANTASTIC SAVINGS

Buy Now for selection while quantities
last. Authentic, easy to assemble, couple
with Lionel. Complete with trucks and
couplers. Minimum order, 3 kits.

Dummy Diesel Loco; CB&Q, Reg. 2.50, Now	1.25
Flat Cars; MKT, GM&O, L&M, B&O, Reg. 1.59, Now	.79
Caboose, NH, SR, CB&Q, MP, MKT, SL&F, Reg. 1.98, Now	.99
These items available at reg. price—	
Powered Diesel; DC mir. 2 rail MP, MKT	8.95
2 Rail Tubular Track curve or straight, Reg. .29, Now	.19
Supply Limited — Road names may be substituted.	

VOLUME BONUS—10 Flat Cars, Set 6.66

AMERICAN FLYER



21234 C&O GP7, Ringing Bell	\$25.00	\$18.88
20290 350w Dual Trans. C.B.	35.00	19.95
24222 Covered Hopper	3.50	2.67
24329 Chemical Tank	4.50	3.39
24577 Jet Engine Trans.	5.00	2.14
24720 Old Time Coach	5.00	1.97
25059 Operating Rocket Launcher	8.00	3.97
25061 Exploding Box Car	8.00	3.17
25071 Operating Tie Ejc. Car	5.00	2.69
25059 Motorized Rocket Sled & Rocket Launcher Car	18.95	5.88
26323-24 Pike Master manual switcher R.H. or L.H.	3.00	1.94
23761 Automatic Semaphore Sig.	9.00	3.97
21165 Loco and Tender, reg. \$14	8.88	
24054 Santa Fe Box Car, reg. \$5	3.77	
24057 Mounds Co. Box Car, reg. \$5	2.97	
21422 Great Northern Reefer, reg. \$5	2.99	
24533 Track Cleaning Car, reg. \$8	6.41	
24539 New Haven Pipe Car, reg. \$4	2.99	
24569 Wrecking Crane, reg. \$7	4.99	
24579 Multi-purpose Car, reg. \$6	2.49	
586 Wayside Station, illum.	4.88	
reg. \$7.95	1.79	
26745 90° Cross Over, reg. \$2.98	1.79	
26782 26-pc. Plastic trestle set, reg. \$5	1.49	
26760 Remote Con. Switches, pr. reg. \$18	14.44	
23830 Piggy-Back Unloader, set, reg. \$8.50	2.97	
23750 Trestle Bridge, reg. \$7	3.49	
704 Manual Uncouplers, reg. \$2	1.00	

PLASTICVILLE

1402 Switch Tower	1.79
1403 Signal Bridge	1.79
1600 Church	1.00
1619 Citizens	1.00
1626 Corner Store	1.00
1630 Cape Cod House	1.00
1704 Barn	1.29
1705 Ranch House	1.29
1706 Station	1.29
1800 Gas Station	1.49
1807 Two Story House	1.49
1908 Split Level House	1.98

BIG TURNTABLE

Ready to Install Complete with
track 16" dia.

Lionel or Amer. Flyer...26.95
HO...22.95

AUTHORIZED LIONEL and FLYER SERVICE

American Flyer Bargains

Lowest prices. Nation's biggest Flyer
dealer. Biggest Selection. Bargain
Circular. Save! Save! Save!...10c

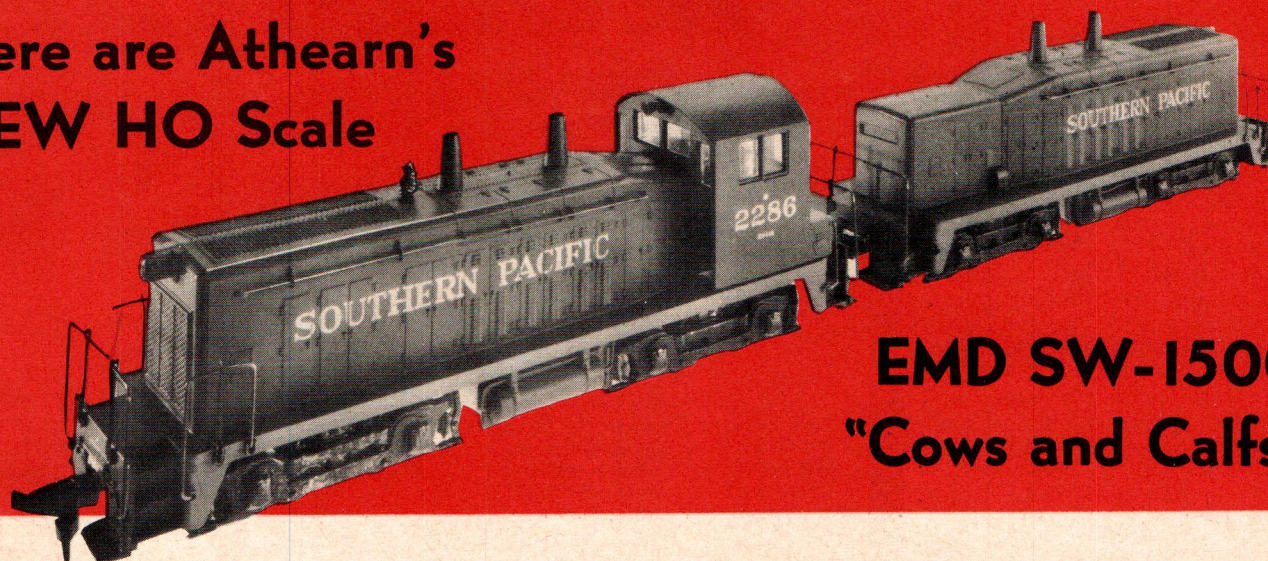
WE STOCK & SERVICE WORLD'S
LARGEST SELECTION LIONEL,
AMERICAN, FLYER AND HO
EQUIP'T. \$250,000 INVENTORY

Buy On Credit

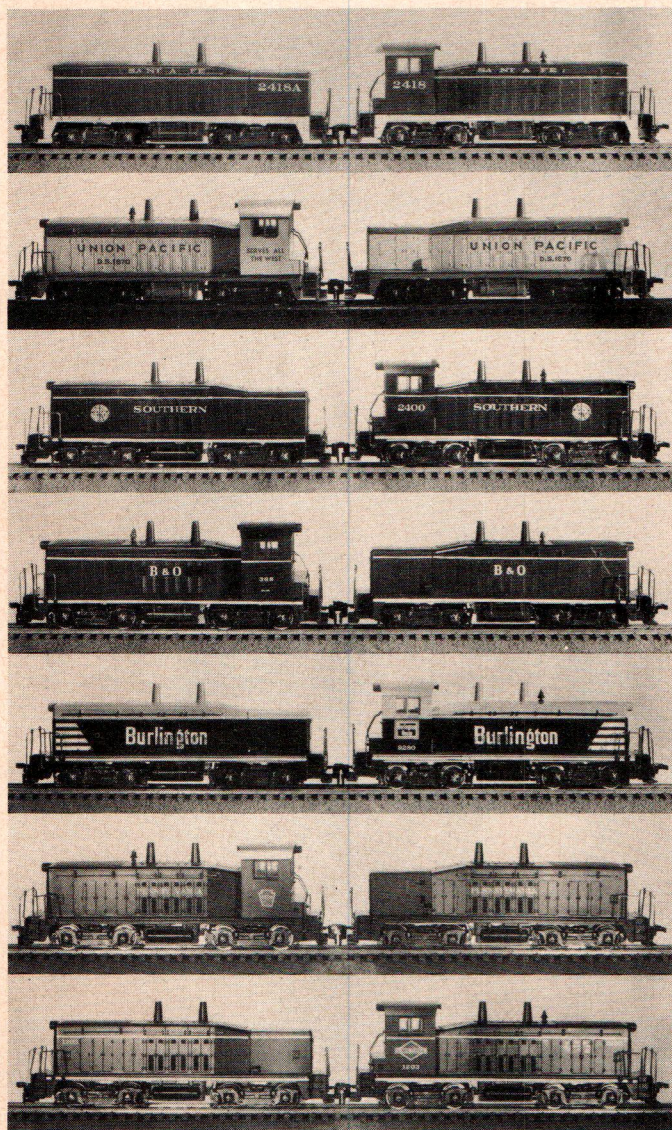
15% down payment on any locos or
merchandise, balance 90 days, 6
months, 1 year. Up to \$1,000 plus
service charges. Send self-addressed
stamped envelope with order, em-
ployment and complete confidential
information.

MORE TALK ABOUT MOTIVE POWER!

Here are Athearn's NEW HO Scale



EMD SW-1500 "Cows and Calfs"



ANOTHER brand new locomotive series is introduced by ATHEARN. The famous Electro-Motive SW-1500 diesel switcher plus a "calf." Almost every railroad has at least one of these units in operation somewhere on its system and the larger lines have fleets of them. Like the prototype, this new ATHEARN creation is versatile, powerful and most useful. Can be used in yards, on short haul main line operations, or for branch line service. The HO scale model by ATHEARN features eight wheel drive, operating headlight and the POWER-FUL motor plus the floating power mounting that assures quiet operation.

Eight road names and authentic matching color schemes for those roads are available. Also available undecorated.

Each engine has a matching "calf" available either as a dummy, or powered. See this new line of motive power at your favorite hobby store TODAY.

ATHEARN SW-1500 switcher,
powered, r-t-r\$10.98

ATHEARN SW-1500 "calf,"
dummy, r-t-r\$ 3.98

ATHEARN SW-1500 switcher,
dummy, r-t-r\$ 3.98

ATHEARN SW-1500 "calf,"
powered, r-t-r\$10.98



ATHEARN

11929 S. Western Ave.

Los Angeles, Calif. 90047

Ray Brown, Jeff Winslow, Mike Pearsall, and Jack Farrell have teamed up on a special presentation of the New York, Ontario & Western's class Y-2 Mountain, which is pretty much the same engine as the New York Central's class L-2C Mohawk. We first ran across Farrell almost a quarter century ago, in our youth, when he was one of the wheels at the Railroad Enthusiasts' New York Division. He thought the O&W was worth preserving on film then, and we're mighty glad he did today. Maybe one of the importers will like this engine, too, in both its versions.

Loco 1, our new diesel book is due out November 1st, a date we're sweating out at the moment. Typesetting is proceeding nicely, most of the pages are pretty well wrapped up, and we're waiting for something to go wrong. We still hope to hit that date, or close to it. We've got a few more diesel plans in this issue, too. Both are Electro-Motive engines. One is an early NW-3 built back in 1939 as Electro-Motive's first real road switcher, although it was essentially an elongated NW-2 switcher mounted on FT trucks, with steam heat added. The second is the modern GP-40, just now being introduced to railroads around the country.

Our Christmas issue is coming up next and we've already amassed a lot of special material for it, along with some extra special goodies we've been holding in reserve. Plans for the Alco H-643 hydraulic drive diesel, for instance, and plans for Erie Railroad No. 10, an early Alco boxcab diesel with innards by Ingersoll-Rand and General-Electric. Quite similar to units which went to the B&O, CRRNJ, and LV.

Photos are always welcome for our Boomer Trail department and we have a special sheet with helpful suggestions which we'll send you upon request, and a stamped addressed envelope will speed it to you. Black and white prints, glossy unmounted are preferred, with sizes between 4x5 and 8x10 preferred. We don't work from color prints. We do use a bit of color on our covers and can use outstanding transparencies showing good layouts and models. Size 2 1/4 x 2 1/4 up to 4x5 are preferred but we can also use critically sharp, well exposed 35mm transparencies.

Hal

RAILROAD MODEL CRAFTSMAN

Including TOY TRAINS combined with ELECTRIC TRAINS and HOBBY RAILROADING, MINIATURE RAILROADING, MODEL & RAILWAY NEWS, THE O GAGER, and THE MODELMAKER (Est. 1924) Magazines.



THE CREW

HAROLD H. CARSTENS
EDITOR AND PUBLISHER

Viola Kaps, Art Director
Russell D. Porter, Midwestern Editor
William Schopp, Technical Editor
Naomi Drake, Dealer Service Dept.
Steven Ahlstedt, Editorial Asst.

Nelly Bleeker, Bookkeeper
Eugenia Abbate, Billing Dept.
Elizabeth Dickson, Circulation Manager
Ida Kruse, Circulation
Phyllis M. Carstens, Asst. to the Publisher

SPECIAL FEATURES

- 30 Boomer TrailPhotos From Our Readers
- 32 The NMRA Blue Ribbon Convention.....Special Report
- 46 Loco Builders Photos.....Nos. 286-292
- 62 CartoonBill Baron

PROTOTYPE & PLANS

- 25 N. Y. O. & W. class Y-2 4-8-2
Ray Brown & Jack Farrell
- 36 Electro-Motive NW-3 Switcher - 1939....Larry Jackman
- 37 Electro-Motive GP-40.....George Trager

CONSTRUCTION & TECHNIQUE

- 19 Build a Stone Cutting Plant.....E. L. Moore
- 24 Rolling Stock for HOn2.....Bruce Bowden
- 38 Single Track Railroading.....Layout Doctor
- 40 Cement Storage Plant.....Dale Bartholomew
- 45 Locomotives You Can't Buy.....Bill Schopp
- 48 Weathering Rub-On Lettering.....Richard Appel
- 50 Out And Back Layouts.....Layout Doctor
- 54 The Cat Knocked Over My Forest.....Bill Schopp

DEPARTMENTS

- 5 Safety Valve
- 9 Dispatchers Report
- 52 Exchange Place
- 14 RMC Timetable
- 56 Test Track
- 58 Classified Ads
- 59 Trouble Shooting
- 66 Advertising Index

THE COVER

A fast stepping steam powered freight train roars through Hell's Canyon while a Great Northern streamliner takes it easy going over the wood truss bridge above, all on the S scale layout of Jesse Bennett, Star Route, Sandpoint, Idaho. Pike is laid with .126 rail on wood ties. Bennett color photo, from S Gauge Herald.

SUBSCRIPTIONS: In U. S., Possessions, and Canada: \$5 per year, \$9 for two years, \$12 for three years. Single copies 50c. Foreign postage \$1 extra per year. All communications regarding subscriptions and changes of address should be sent to: Circulation Manager, Railroad Model Craftsman, P. O. Drawer C, Ramsey, New Jersey 07446.

RAILROAD MODEL CRAFTSMAN is published monthly by the Model Craftsman Publishing Corporation, 6 East Main Street, Ramsey, New Jersey 07446. Harold H. Carstens, President; Henry G. Carstens, Vice President; Robert R. Merkle, Treasurer; Phyllis M. Carstens, Secretary. Second Class postage paid at Ramsey, New Jersey, and Sparta, Illinois.

CONTRIBUTIONS: Articles, and photographs are welcome. Contributors are advised to retain a copy of their manuscripts and illustrations. When requested, we will endeavor to return all material in good condition if accompanied by return postage. Payment is made upon publication. The contents of this magazine must not be reprinted without written permission of the publisher. Copyright© 1966 by Model Craftsman Publishing Corporation. Printed in the U.S.A.

ADVERTISING: Main advertising offices, 6 East Main Street, Ramsey, New Jersey 07446. Phone area 201-327-1091. WEST COAST ADVERTISING REPRESENTATIVE: Joseph Mervish Associates, 4721 Laurel Canyon, Suite 211, North Hollywood, California 91607. Phone area 213-877-7556.



SAFETY VALVE



Paul Jansen's Filthy, Dirty Engine

I was enjoying the Sept. RMC fine until I came to page 58 and there was Paul Jansen's MT-4, filthy and dirty looking. What is that machinist doing, salvaging parts off one engine to keep another running? Surely the engine is not live (steamed up) or he'd lose a few eyes. He'd never last long around a railroad.

But what is really bugging me is this weathering stuff. I have watched trains all my life, my father worked for a railroad and I have been an engineer and foreman for 24 years on the Kansas City Terminal Railway. And in all those years I have seen a lot of steam, and it is hard to recall engines looking as filthy as they are when they have been weathered by steam fans. Even when they were being sent to the scrap dealers some never looked that bad.

Some of the old master mechanics would turn over in their graves if their engines showed up looking like the beautiful (?) weathered models. Actually, in my opinion, weathering shows the very last of steam when it was used as stand-by power, just prior to becoming scrap.

You could travel the width of the country and see more well maintained engines than ones which were neglected and dirty. From the SP Day-lights to the B&O Pacifics, they were all clean.

When the Katy passenger power arrived at our roundhouse, wipers were employed to wipe the engines

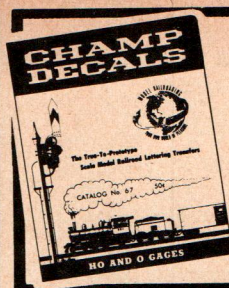
down from the top of the stack to the rail. You could run your hands over the rods and never get dirty. The only oil or grease was on the crosshead guides and on the rod cups. Even the freight and switching power was clean.

The Frisco engines were well kept, polished rods and jackets, with gold lettering and striping. The Wabash blue was not a muddy brown but a beautiful blue. The Southern, was known far and wide for its well maintained green engines.

So if you are going to model steam, do so with the pride of ownership and with the idea of creating a better image in the eye of the public served by your railroad, not an image of bankruptcy or one in which the stingy president is after the Almighty Dollar!

What better sight than the gleaming jacket and tank sides, with rods flashing in the sunlight, pulling a string of well groomed varnish. That was in the days of glory, and not until the last did they start looking like some of those weathered models. Even our switching engines were not as cruddy as some of the models when they were hauled off to the scrap dealer. Dirt and grime wore out moving parts. Keeping engines clean was the reason some lasted fifty years and more.

L. E. Vincent
600 W. 91 Terrace
Kansas City, Mo. 64114



NEW !!
8 1/2x11 HO-O GAUGE
CATALOG #67
At Your Dealer, or
50¢ postpaid
**CHAMPION
DECAL CO.**
P. O. Box 1178
Minot, North Dakota

MAIN LINE MODELS 36' STOCK CARS

- | | |
|--------|--------------------------|
| OSC- 1 | Swift Live Stock Express |
| OSC- 2 | Armour Express |
| OSC- 3 | Virginian |
| OSC- 4 | New York Central |
| OSC- 5 | Southern Pacific |
| OSC- 6 | Great Northern |
| OSC- 7 | Santa Fe |
| OSC- 8 | Union Pacific |
| OSC- 9 | Western Pacific |
| OSC-10 | Pennsylvania |
| OSC-11 | Missouri Pacific |
| OSC-12 | M-K-T |
| OSC-13 | Texas & Pacific |
| OSC-14 | Southern |
| OSC-15 | C.M. & O. |
| OSC-16 | Wabash |
| OSC-17 | Chicago & North Western |
| OSC-18 | Denver & Rio Grande |

Dealers and Direct Mail.....**\$9.95** less trucks

Main Line Models

P. O. Box 250

Falls Church, Va.

NEW

"BONUS DETAIL"
with Cal-Scale

Illustrated Folder **15¢**
"HO" CAL-SCALE
P. O. BOX 475 PINEDALE, CALIFORNIA



Better than ever! READY-TRACK

For SMOOTHNESS of operation and realistic appearance, the track and roadbed is the most important part of your Layout . . . be sure you use the BEST! 'READY-TRACK' is the only track of its kind . . . with both rail-track and raised, ballasted embankment COMPLETE in ONE PIECE! Creosote stained wood-ties . . . Nickel-Silver or Brass

Rails spiked in position . . . Rail-Joiners . . . the COMPLETE 'HO' TRACK and ROADBED . . . READY for immediate operation! 'READY-TRACK' has the finest COMPLETE LINE of Mounted Switches, Crossovers and Crossings that match perfectly.

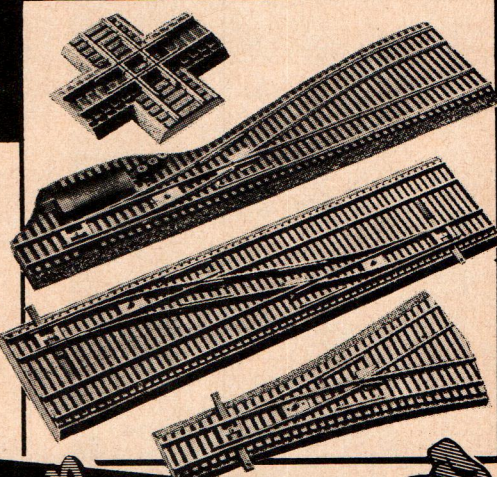
'READY-TRACK' features the famed Tru-Scale "Hi-Speed" Switch with the Closing-Frog, which eliminates 90% of all major derailling problems! No rail-gaps, nor any electrical dead-spots in the rails. The most fool-proof ever developed.

See Your Hobby Dealer.

Send for CATALOG & Instructive MANUAL

. . . the complete story on all Tru-Scale Products! Illustrated . . . with informative Articles on how to use Scenery, Buildings and Structures in your Layout . . . Hints, Tips and Instructions for Layout Planning, Track-Work, Wiring the Automatic Train-Control relays . . . and many other valuable Facts. Enclose 25¢ to cover cost.

Tru-Scale Models, Dept. C, San Dimas, Calif.



**Tru-Scale
Models**



MODEL
STRUCTURAL SHAPES
OF BRASS



**ANGLES — BEAMS — CHANNELS
H COLUMNS — TEES — ZEES**

All sizes to any scale — made in U.S.A.
Flat, Round & Square Bars • Sheet Stock & Tubing

SPECIAL SHAPES CO.

5007 BELMONT RD., DOWNERS GROVE, ILL.
See your dealer or write for Catalog

PRECISION CONTROL?

Try the MICRO-THROTTLE

- * Transistorized, variable pulse-width
 - * Replaces your present rheostat
 - * Built-in overload protection
- Send stamp for detailed data sheet
Dealer inquiries invited

TRI-DELTA

SOPHISTICATED ELECTRONICS

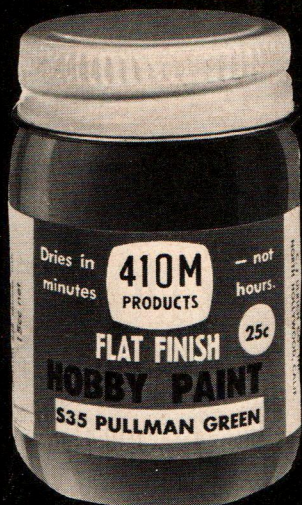
Box 20311C San Diego, Calif. 92120

RED-BALL has made unusual HO car kits for more than a quarter century! About 200 now. Many are unique and original—available nowhere else. Also more than 57 varieties of HO trucks in HO, many of these are made by no one else but Red Ball. And we make hundreds of of specially designed, beautifully detailed cast parts (for scratchbuilders) pressure cast in our famous Red Ball engraved brass dies. Try us once! Red Ball also imports brass locomotives and specialties for both HO and HO_N3.

Send long (#10) self-addressed stamped envelope for our new Red Ball News #9—or send a dime if you prefer.

HOWELL DAY P.O. BOX 301C
DUNELLEN, N.J. 08812

ULRICH 410M



AUTHENTIC RAILROAD COLORS

ONE COAT COVERS / ALL POPULAR COLORS

- EASIEST TO USE (BRUSH OR SPRAY)
- FAST DRYING (5 MIN. TO HANDLING)

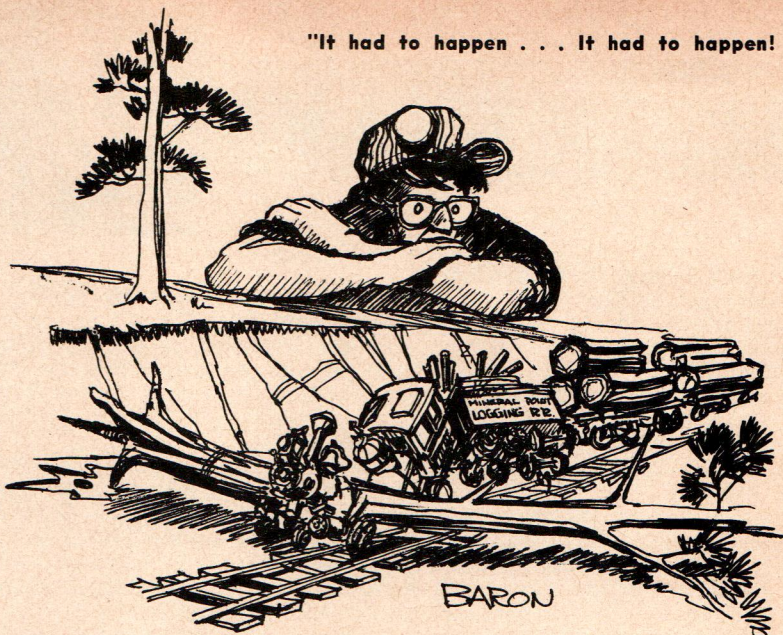
FLAT BLACK
FREIGHT CAR RED
YELLOW
TUSCAN RED
PULLMAN GREEN

ALUMINUM
WHITE
THINNER
GRAY
GREEN

SEND 10c FOR CATALOG

C. J. ULRICH CO., INC.

11423 VANOWEN • NO. HOLLYWOOD, CALIF.



"It had to happen . . . It had to happen! . . ."

Interurbans

The article on interurbans by Mischke was good but not entirely correct. The Interstate Public Service 150-157 series combines had a train door on the rear end. All equipment used in service with the 150's had train doors on both ends, including the 300 series trailers, the parlor-diners, and the sleepers.

The diners did not carry a conductor, as he acted as both conductor and dining car steward. I rode the IPS between Louisville and Indianapolis a number of times and I remember the conductor collecting for the meals. This was verified by Mr. Whitesides, a conductor on the IPS who was responsible for the Brotherhood of Railroad Trainmen representing the IPS employees. He was later a motorman on the Indiana Railroad.

Richard Hardin
3841 Peachtree
Louisville, Ky. 40215

We Blokes Have It Easy!

Being a reader for over six years I feel it is time I wrote from this small corner of the world to let you know how much I enjoy your magazine. You know, you blokes have it pretty easy when it comes to model railroading. You have hobby shops, NMRA, scale manufacturers, conventions — the lot. About the only thing we have more of in New Zealand than you is steam locomotives — big ones, I mean. If you can call 3' 6" big!

You don't have trouble getting parts to make up locos, rolling stock, scenery, track, etc. You have large and respected firms like Athearn, Atlas, P.F.M., Tenshodo, Cal-Scale, tru-scale, Ulrich, and a host of others.

Here in New Zealand, model railroading is bigger than you might think. The majority of modelers have commercial sets like Tri-Ang, Marklin, and a few other makes — all classified as toys by the customs dept.

The New Zealand Model Railway Association does, however, intend to do something about this.

There is a lot of scratch building going on and a few pioneers are starting to produce N. Z. Railways kits for rolling stock. We held our first National Model Railway Convention at Easter and it was a howling success. But things in general are tough in New Zealand.

I model in HO and O. I have a large Fleischmann O gauge layout and a small HO Marklin layout. Most of the Fleischmann layout is scratch built.

John R. Houghton
M66 Gladstone Road
Gisborne, New Zealand

Any chance of getting a sample N. Z. car kit, John? Ed.

The Tinplater

For many months now the only articles on toy or tinplate trains are those aimed at the collector. It would appear to the casual reader that ready to run or tinplate equipment is a thing of the past.

Not all electric train fans have the desire or means to go into a scale type operation. I have not graduated into the dubious advantages of kit building, DC power, or amateur trackwork.

Can we see more articles dealing with combinations of tinplate and scale equipment, which is probably the most common type of railroading going on?

Ronald William
12614 Fairview
Blue Island, Ill. 60406

Removing Those Labels

In answer to Eugene Kressig's query in the June issue of Railroad Model Craftsman regarding the removal of your mailing label from the plastic bag in which you mail your subscription copies, I have an answer.

As a self employed printer I use a cleaning fluid with a kerosene base for cleaning ink rollers. I apply a generous amount of this fluid to the label, let it soak for a few minutes, and then remove with a pair of tweezers, not too fast, and, presto, the label comes off nice and clean. Just like soaking off postage stamps in water.

Hope this proves satisfactory.

Emmerett J. Dane
21 Hannum Ave.
Homer, N. Y.

Very simple. Just lay the plastic cover flat and saturate with lighter fluid. Let soak a few minutes and peel off carefully. Any spots of glue that don't want to give up can be rubbed off with a rag soaked in lighter fluid.

B. C. Scherzinger
2165 Dana Ave.
Cincinnati, Ohio

Wants A BAR Caboose

I have recently obtained an Electro-Motive BL-2 diesel with Bangor & Arrostock lettering and have been looking for a BAR crummy. Can anyone help me find one?

Steven R. Seidel
1401 W. Hickory St.
Kankakee, Ill. 60901

Why not be old fashioned and build a caboose kit and letter it with BAR decals offered by Champion and Walthers? Steve, incidentally, also sends along a reminder of the Teen

Association of Model Railroading, open to anyone ages 13-19. Further info from David Burris, 2628 - 10th St., Baker, Oregon 97814. Ed.

NMRA Couplers

I noted a letter somewhere from someone lamenting the inclusion of standard NMRA-type couplers on HO equipment being sold. Is there some other type that is preferable and generally used by modelers? If so, what is its advantage of the NMRA-type?

Robert B. Fisher
505 Front Beach Drive
Ocean Springs, Miss.
39564

This magazine does not recommend any one product over any other product. The NMRA X-2f type coupler is the standard coupler for all ready to run HO train equipment sold in the U.S.A., excepting a few imported lines. Because of this fact, and because the NMRA-type coupler is such a simple device and costs very little when made in quantity thus not affecting the price of kits, it is included in many kits as a convenience to modelers who prefer it, and there are many.

However, a large number of advanced modelers prefer other types of couplers, notably AAR types which must be hand connected in most cases, and the various Kadee couplers. The Kadee popularity is due to its close realism to the prototype, low

CABOOSE SPECIAL

All metal imported cabooses RTR Prepainted, full detailed w/o trucks, choice:



CNJ (Red), UP (Yellow)

3.88 or 2 for 6.88

All metal trucks: 50c or 2/85c
LAST LIRR 2-8-0 Camelback Brass
CALL Factory Painted 22.88

PFM One-of-a-kind in Mint Condition

CROWN DM&IR 2-8-8-4 unptd... 275.00

CROWN CB&Q 4-8-4 new series... 125.00

CROWN C&NW 4-8-4 new series... 134.50

NYC 4-8-2... 85.00 NYC 4-6-4... 75.00

NYC 4-8-4... 100.00 SF 2-8-2... 75.00

Send Stamped Envelope for listings

TRACKSIDE SPECIALTIES
HOME OF "HO" CUSTOM BUILT ENGINES AND MODEL RAILROAD EQUIPMENT

12 Barker Rd., Somerset, N. J. 08873

ROUNDHOUSE
Products

QUALITY CARS

Send 10c for Catalog
MODEL DIE CASTING INC
P O BOX 928 | HAWTHORNE | CALIFORNIA

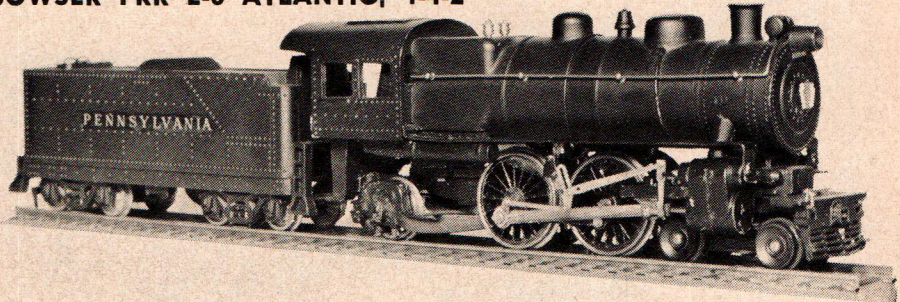
Complete with Low Side Tender, Kit... 29.50
Loco Kit Only 24.50
Tender Kit Only 6.95

This model of one of Pennsy's fast E-6 passenger engines has a well detailed diecast lead boiler, turned brass pop valves, whistle and handrail stanchions and a lost wax brass keystone for the smoke box front. The walks on the side of the boiler are brass with diecast air tanks and air compressor. The mechanism has a diecast underframe with 80" drivers, embossed side and main rods and full working valve gear. Sprung tender trucks are equipped with RP25 wheels and an X2f coupler is supplied with the tenders.

Mechanism for scratch builders..... 18.50

Kit includes side rods, main rods, crossheads, valve gear, frame, cylinders, drivers, motor with worm, lead and trailing trucks. No boiler details or pilot are included.

BOWSER PRR E-6 ATLANTIC, 4-4-2



BOWSER PRR H-9 CONSOLIDATION 2-8-0

Kit complete with Low Side Tender.... 32.50
Loco Kit Only 27.95
Tender Kit Only 6.95

The Pennsy H-9 was used for heavy switching and branch line freight service until almost the end of the steam era. This model includes a heavy diecast lead boiler, turned brass pop valves, whistle and handrail stanchions; lost wax brass round number plate; diecast walks with air compressor, air tanks, power reverse and tool box cast in place; embossed side rods and main rods with alligator crossheads and full working valve gear. The mechanism has a diecast underframe with 62" drivers — two middle drivers are blind the same as the prototype. Sprung tender trucks are equipped with RP25 wheels and an X2f coupler is supplied with the tender.

Mechanism for scratch builders..... 20.50

This kit includes side rods, main rods, crossheads, valve gear, frame, drivers, cylinders, motor with worm and lead truck. No detail castings are included, such as pilot, air tanks, power reverse, etc.

OTHER BOWSER KITS AVAILABLE

USRA Heavy Mountain, 4-8-2, less tender 39.95
UP Challenger, 4-6-6-4, less tender 49.50
NYC K-11 Pacific, 4-6-2, less tender 24.50
Semi-Vanderbilt tender 8.50
High Side Tender 6.95
High Side Tender with doghouse 7.50
Long Haul tender 8.75
Literature, including the USRA Heavy Mountain supplement to the reference manual..... .20
AND don't forget the Bowser Manual... 1.00

BOWSER KITS ARE AMERICAN MADE—PARTS ALWAYS AVAILABLE

DEALERS
ORDER
DIRECT

Bowser

MFG. CO., P. O. BOX 122, MONTGOMERYVILLE, PA. 17754

ORDER BY MAIL FROM AHC FAMOUS BRANDS

JAMBOREE OF VALUES

SEE NEXT PAGE


SAVE! STOCK UP!

AMERICA'S HOBBY CENTER, INC. 146C WEST 22nd. ST N.Y., N.Y. 10011

LOCOS

TYCO

READY-TO-RUN SALE



0-4-0 SHIFTER LOCO & TENDER WITH SMOKE SPECIAL READY-TO-RUN

S.P. OR B.O. **10.88**

SINCE 1931, MODEL BUILDERS THE WORLD OVER AGREE

IT PAYS TO BUY AT "AHC"

- ★ 14 DAY MONEY BACK GUARANTEE
- ★ BIG BONUS DEALS, SUBSCRIPTIONS, ETC.
- ★ BETTER VALUES
- ★ FASTEST SERVICE
- ★ WE STOCK ALL FAMOUS BRANDS
- ★ SHOP WITH CONFIDENCE
- ★ HELPFUL HINTS & ADVICE
- ★ THE BEST "POSTPAID" DEAL IN AMERICA

WE MATCH ANY OFFER

AHC matches any offer made by any other advertiser. Attach ANY ad in this issue to your order — and take advantage of the AHC "extras."

LOCO

READY-TO-RUN



F7 DIESEL LOCO

"A" UNIT **4.99**

ROAD NAMES: S.F., B.O., P.R.R.

LOCOS

VARNEY

METAL BODY



GG-1

READY-TO-RUN **24.95**

2498 KIT

SUPER BERKSHIRE KIT

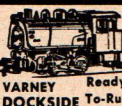
W/TENDER ALL METAL **49.98**

WORN GEAR DRIVE

LOCOS

VARNEY

Ready-TO-RUN



DOCKSIDE

SWITCHER-NEW 5 POLE PER-WAG MOTOR

5.95

VARNEY CASEY JONES

ALL METAL-WORKING HEADLIGHTS-PER-WAG MOTOR WITH TENDER

14.95

OLD LADY RTR \$17.95

LOCOS

ATHEARN

READY-TO-RUN



"HUSTLER"

3.99

GP 30 DIESEL

READY-TO-RUN

10.95

ATSF, C&O, U.P.

KIT WITH MOTOR **8.95**

DUMMY KIT **2.95**

LOCOS

TYCO

8.25 KIT



0-6-0 Switcher

8.25 KIT

GP 20

READY-TO-RUN

ATSF, C&O, N.Y.C., U.P., R.R.

10.98

TYCO

CAR KITS

WHILE THEY LAST

79¢ ANY 4 FOR **4.39**

EACH ONLY WITH NMRA REG. \$2.49 EACH COUPLES

4 WHEEL BOBBER CABOOSSES **84¢**

DERRICK CARS **1.00**

WAGON, DERRICK, READING

LOCOS

ALCO

Riviera



"Krauss-Maffei"

DIESEL LOCO

L5000 Denver & Rio Grande L5001 Southern Pacific

4-8-8-2 CAB FORWARD SOUTHERN PACIFIC... \$43.95

2-8-8-2 Y&N Mallet PRR, S.F., NORFOLK & W. 39.95

2-8-4 BERKSHIRE N.Y.C., P.T.E., PERE MAR. 27.95


12.95

READY-TO-RUN

LOCOS

TYCO

READY-TO-RUN



GENERAL

4-4-0 **14.95**

WITH SMOKE **18.95**

9.75

SW7 Switcher

READY-TO-RUN

NH, SP, B&O, PRR.

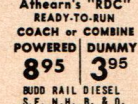
12.95

KIT..... 6.95

LOCOS

ATHEARN

READY-TO-RUN



RDC

COACH OR COMBINE

8.95

BUDD RAIL DIESEL


S.F., N.H., B. & O.

3.95

LOCOS

TYCO

9.88



GP-20

READY-TO-RUN

ATSF, C&O, N.Y.C., U.P., R.R.

10.98

LOCOS

ATHEARN

READY-TO-RUN



40' FOOT SPECIAL BOX CAR

1236 TOLEDO, PEORIA & WESTERN

1237 WESTERN PACIFIC

1238 NEW HAVEN

1240 NAT'L CYL. GAS

1241 LINDSEY & AIR PROD.

1242 DEL. & HUDSON

1243 ERIE & LACK.

50' FOOT AUTO BOX

1318 UP AUTOMATED RAILWAY

1320 FRISCO

1321 L & N DIXIELAND


219

Each Car Kits

LOCOS

ATHEARN

NEW EMD SD-45



FREIGHT DIESEL LOCO

READY-TO-RUN

A NEW GENERATION DIESEL-POWER PLUS 12 WHEEL, GEARED DRIVE & A POWERFUL MOTOR. AN HO POWERHOUSE.

ROAD NAMES: PENNA., S.P., U.P., S.F., C. & P., S.A.L.

14.95

SDP-40

READY-TO-RUN PASSENGER

ROAD NAMES: DIESEL B&O, C&W, NH, NYC, SANTA FE, SP.

14.95

LOCOS

TYCO

TRAIN SET



FREIGHT TRAIN SET

SET #6602 SF, CN, & PRR

11.88

LOCOS

TYCO

8.95



F-9 DIESEL

READY-TO-RUN

ROADS: B&O, CP, ACL, C&O, D&W, SF, NH, C&O, PRR, CH.

10.98

LOCOS

TYCO

14.95



ALCO CENTURY 430 DIESEL

OPERATING HEADLIGHT, ROAD NAME: GBAN, NH, SP & S.

KIT WITH ABOVE ROAD NAMES

10.98

LOCOS

ATHEARN

READY-TO-RUN



2-6-2 LOCO

W/TENDER, OPERATING HEADLIGHT, ROAD NAME: SF, PRR.

KIT K234 UNDECORATED

14.95

BARGAIN

TYCO

READY-TO-RUN



2-8-2 MIKADO

OR

4-6-2 PACIFIC

EACH

16.95

LOCO & TENDER


MIKADO KIT... \$12.25

PACIFIC KIT... 10.49

LOCOS

TYCO

READY-TO-RUN



STOCK CARS

11.9

EACH

REEFER

12.5

EACH

GONDOLA

12.5

EACH

HOPPER

12.5

EACH

SKID FLAT

12.5

EACH

LOCOS

TYCO

READY-TO-RUN



TANK CARS

13.9

EACH

COVERED HOPPER

16.9

EACH

8-WHEEL CABOOSE

16.9

EACH

LOCOS

TYCO

READY-TO-RUN



CHEMICAL

13.9

EACH

TANK CARS

13.9

EACH

COVERED HOPPER

16.9

EACH

8-WHEEL CABOOSE

16.9

EACH

LOCOS

TYCO

READY-TO-RUN



HO CARS

99¢

Each

With N.M.R.A. Couplers

Removed from leftover train sets. Brand New and 100% Guaranteed. Your Choice: Tank Car, Box Car, Cattle Car, Reefer, Gondola, or Caboose. Our Choice of Road Names and Mfr.

Order-By-Mail AMERICA'S HOBBY CENTER, 146C West 22nd St., New York, N.Y. 10011

failure rate in operation, and on the magnetic version, being able to uncouple away from a ramp. The Kadee also costs more, and is in a few cases somewhat tricky to mount.

The NMRA-type coupler is, on the other hand, economical, rugged, and also dependable when operated with other couplers of the same make. The NMRA-type regrettably, is made to a wide variety of tolerances, materials, and spring tensions, and while various makes can couple together, they don't all do so as intended by their original designers.

Other couplers include Mantua, Baker, Japanese inverted-Baker type, Rivarossi, Fleischmann, and other European proprietary types mostly rather scarce in the U.S.A. Ed.

RSD-15 Diesels by Alco

I would like to add more information on the RSD-15 and RS-27 diesels, plans for which appeared in the June 1966 RMC.

Most of the RSD-15 units have high noses. Santa Fe units 800-849 and SP 5150-5162 (ex-T&NO 250-252 and SSW 850-859) have low noses. Southern Pacific never had any RSD-15's numbered 4816-4818. These numbers were assigned to the first three SD-35's built in 1964, since renumbered 6900-6902.

Some of the DM&IR RSD-15 units were sold to the Bessemer & Lake Erie, renumbered to their 860 series. Pennsylvania has eleven units numbered 8606-8616. Units 8606-8610 are equipped with steam generators and are used as passenger helpers over the Allegheny's. C&O has a number of RSD-15's in their 6800 series.

The Pennsylvania also has 15 RS-27 engines, numbered 2400-2414. C&NW also has four units, believed numbered 401-404.

James L. Sorenson
USS Iwo Jima LPH-2
S-1 Division
FPO San Francisco, Calif.
96601

Grand River & Western Club

Just a note of thanks for running the photo of our club in your Sept. issue. The picture has brought response and visitors from our city and from out of state. However, we have changed our meeting night to Tuesday, same time and place, and perhaps you could mention this.

Art Million, Secy.
1205 Oakes Street
Grand Haven, Mich.
49417

Ach Du Lieber!

I'm sitting here gazing steadily at the photo top page 31, Sept. 1966 RMC (German models) trying to tell myself that there are no rods connecting wheels on this otherwise finely detailed engine?

Paul Damrin
1046 Fairwood Ave.
Columbus 6, Ohio

No, Paul, that doesn't make it a 4-2-2-4-2-2T. Ed.

DISPATCHERS REPORT

K & P Enterprises Co., 5907 West Pico Blvd., Los Angeles 35, Calif., offers small but useful items for the model rail including highly realistic pine trees which don't look like inverted ice cream cones dyed green, and four detailed rocks cast in different useful sizes. And a variety of model railroad forms. Send a stamped addressed envelope for the current price list. The forms include Bad Order Reports, Project Orders, Purchase Orders, and Equipment Inventory cards, and list at 98c per hundred padded, or a pad of all four types at \$2.98.

CRC Chemicals, Limekiln Pike, Dresher, Pa. 19025 has a new aerosol corrosion combatant called CRC 3-36. The manufacturer claims that CRC 3-36 prevents rust and corrosion, displaces and seals out moisture, lubricates, cleans, and penetrates, yet never becomes hard or tacky and does not need to be removed. The CRC 3-36 is inert and non-toxic. RMC is currently testing this new product which is not at present available in hobby shops but might be offered through better hardware stores.

Dome Car

Bill Carvin, editor of the PCR's "Branch Line", sends along a headline from the Phoenix "The Arizona Republic", reproduced on these pages in reduced form. Which prompted Bill to relate about the O gauger who walked into his hobby shop and proclaimed that he was getting out and into HO, perplexing the hobby dealer until the modeler showed the headline and exclaimed, "How can we buck this kind of competition!"

Northwest Short Line, Box 423, Seattle, Wash. 98111, expecting its new Milwaukee Road S-2 4-8-4 in Feb. 1967. NWSL's class Q-6 Northern Pacific 4-6-2 still available at \$54.50 brass unpainted RTR.

Pacific Fast Mail, Box 57, Edmonds, Washington 98020, has just released its Eleventh Catalog, bringing a number of new locos to the line and deleting a few old favorites. Should we mention the new Fujiyama SP M-4 Mogul or the B&O 0-8-0 L-2 or E-27ca 2-8-9? Or Frisco's Russian Decapod from United. (How much of a job to convert that one into an Erie J-2 we ask again?) and the Uintah-Sumpter Valley HOn3 2-6-6-2? And in modern diesels. the GP-35 from Tenshodo and the SD-24, and the V&T Club Car "Julia Bulette" by Fujiyama. There's lots more, including the Crown limited-run Great Northern R-2 2-8-8-2 and the forthcoming Erie S-4 Berkshire (Fujiyama again). The 36 page catalog is yours for only 50c and all

SPECIAL MAIL-ORDER VALUES FOR "HO" MODEL RAILROADERS

Order-By-Mail From America's HOBBY CENTER, 146 West 22nd St., New York, N.Y. 10011

Trackside BUILDINGS

ATLAS KITS DETAILED HO SCALE PLASTIC BUILDINGS.

701 GATE TOWER.....99
702 TRACK SWAN.....99
703 WATER TOWER.....1.49
704 SIGNAL TOWER.....1.49
705 TEL. SWANTY.....49
706 PASS. STATION.....1.98
707 STA. PLAT. SET.....98
714 WAREHOUSE SML.....98
715 COCA COLA STD.....98
716 STONE DWELLING.....98
717 BOAT HOUSE.....98
718 BARN/CORN CRIB.....98
720 RANGER STATION.....98
725 LUMBER SHED.....1.29
727 BARN & SHED.....1.29
749 FREIGHT STATION.....1.98
750 LUMBER YARD.....49
751 OFFICE BUILDING.....2.49
752 MODERN HOME.....2.49
759 WATERMILL.....2.98
759P WATERMILL PUMP.....2.98
760 ROADSIDE RESTAURANT.....2.98
775 12 TELEPHONE POLES.....49
776 FENCE & GATE.....69

Revell BUILDINGS

OPERATING ENGINE HOUSE #T-8028 **2 98**
FREIGHT STATION #T-8020 **1 49**
SMALL TOWN STATION T-9001 **1 98**
SUYDAM BLACK BART MINE 225 **KITS**

SUPERIOR BAKERY

TRACKSIDE BLDGS. #T-8002 **1 98**
BARNYARD SET #T-8015 **1 98**
HOUSE #T-8028 **2 98**
FARMHOUSE SET 8 PC. #T-8003 **1 98**

HO BLDGS. & STRUCTURES

450 COMPLETE MINING INDUSTRY PKG. 16.90
24 WYOMING COAL MINE 5.95
8 3 STALL ROUNDHOUSE 5.75
8X EXTRA STALLS EACH 1.25
9 2 STALL ENGINEHOUSE 4.25
80 YARD CONTROL TOWER 5.50
73 MAIN ST. STATION 4.25
71 YOUR HOBBY SHOP 2.75
72 POLICE THEATRE 4.95
717 LIGHTING
75 TRIANGLE CAFE W/INT 4.25
81 GRAND JUNCTION BOX WORKS 3.25
82 PUB/HA CHOWS
FEED MILL 3.95
83 SUNKIST CITRUS 3.25
SWIFT MEAT PKG. PLT 3.95
541 MODERN FACTORY 2.50

HO FIGURES

HO FIGURES #81 SET OF 3 METAL FIGURES, 7 FIFEMAN BRAKEMAN AND ENGINEER PEOPLE & PASSENGERS **29c**
HO FIGURES #81 SET OF 3 METAL FIGURES, 7 FIFEMAN BRAKEMAN AND ENGINEER PEOPLE & PASSENGERS **98c**
HO FIGURES #81 SET OF 3 METAL FIGURES, 7 FIFEMAN BRAKEMAN AND ENGINEER PEOPLE & PASSENGERS **25c**

"HO" Switches

"HO" Switches 1 25
OUR OWN ANTRON BRAND, ASSEMBLED #4 OF #6 RH OR LH BRASS
NICKEL SILVER 1 95

SALE • HO TRACK SPACERS

3 FT. FLEXIBLE TRACK 49c
MINIMUM OF 5 PIECES
Our own "Antron" brand. Made to our own & NMRA specifications. Solid brass tie strip. All on heavy fiber tie strip. Nckl Silver 69c (Brass) 25 for \$10.00 Atlas Track-3 Ft. 75c

HO CUTOOT CITY

HO CUTOOT CITY CARDBOARD SALE CUTOOTS IN COLOR! **98c**
REG. \$1.29
RAILROAD MODEL CRAFTSMAN'S CUTOOT BOOK HAS FULL COLOR CUTOOTS FOR MAKING A COMPLETE HO CITY WITH CAR, LOT, STORES, POWERHOUSE, SERVICE STATION, TRUCK & RAIL TERMINAL, HOUSES, HWY. SIGNS, ETC. PRINTED ON HEAVY CARDBOARD

HO RAIL

HO RAIL Code 100 99 Ft. Bundle Brass Nckl. Silver **3.98** **4.79**
HO TIE STRIPS.
Track Tie Strip—25 Ft. \$1.50
Switch Tie Strip—10 Ft. 2.00
Double Tie Strip—10 Ft. 2.50

PRECISION SCREWDRIVERS

PRECISION SCREWDRIVERS 98c
SET OF 5 IMPORTED
NOS. 1-2-3-4-5
5 PIECE PRECISION SCREWDRIVER SET A MUST FOR EVERY HOBBYIST

Snap Track

Snap Track 19c
STRAIGHT 3" 5" 9" RADIUS 15, 18, 22"
TERMINAL 49c
RETRAILER TRACK EACH

PASSENGER CARS

PASSENGER CARS R-T-R Roadnames: S.F. & P.R.R.
STANDARD FULLMAN OR COMBINE **350** EACH
DELUXE COMBINE, DINER OR FULLMAN **698** EACH
OBSERVATION **398** EACH
OBSERVATION **798** EACH
READY-TO-RUN

HO TRUCKS

HO TRUCKS 50c
Nylon Tires. 3 Pr. \$1.00
HO TRUCKS 50c
Nylon Tires. 3 Pr. \$1.00

HO RR. PARTS

HO RR. PARTS GRAB-BAG \$1
WORTH OVER \$3.00
ASSTD. SCRATCHBUILDER CAR & LOCO PARTS, PLUS LOTS OF BONUS EXTRAS

DECAL BARGAIN

DECAL BARGAIN 99c
GRAB BAG ASSORTMENT. CONTAINS: 5 COMPLETE STEAM LOCO SETS WITH HERALDS, ROAD NAMES, NUMBERS, ETC., MULTI COLORED DECAL SHEETS

Thor's Switch

Thor's Switch 1 49
6-24V AC-DC BEST QUALITY, FOR ABOVE OR BELOW MOUNT

CATALOGS & BULLETINS

CATALOGS & BULLETINS 25c
HO MODEL RAILROAD CATALOG. 128 PAGES, PICTURES AND DESCRIBES THOUSANDS OF MODEL RAILROAD CARS, LOCOMOTIVES & ACCESSORIES. THE MOST COMPLETE HO REFERENCE GUIDE AVAILABLE...
Special COMPLETE SET OF ALL HO CATALOGS **1 29**
☐ MODEL AIRPLANE 160 Pg. **50c**
☐ PLASTIC MODEL DISPLAY **25c**
☐ SLOT RACING & PARTS **25c**
☐ AV AIRPLANE BULLETIN **5c**
☐ RADIO CONTROL & EQUIP. **25c**
☐ RAILROAD BULLETIN **5c**
☐ DISPLAY MODEL SHIPS WOOD HULL **40c**
☐ SC SLOT RACING **5c**

MAIL THIS ORDER BLANK NOW

AMERICA'S HOBBY CENTER 146c West 22nd St. New York, N.Y. 10011
PLEASE PRINT NAME & ADDRESS PLAINLY

RUSH ORDER TO

NAME _____ ADDRESS _____ CITY _____ STATE _____ ZIP _____

QUANT. PRICE EACH NAME & DESCRIPTION OF ITEMS (MODEL # IF KNOWN) TOTAL

25c 128 PAGE HO MODEL RAILROAD CATALOG

25c 64 PAGE MINI-HANDBOOKS (LIST NUMBERS)

IF ORDER IS UNDER \$3.00 ENCLOSE 25c FOR POSTAGE & PACKING.

C-866 TOTAL

NEW **VOLLMER** 1967 CATALOG

32 pages in full color illustrates all of the new Vollmer structures plus the regular line including . . . engine facilities, stations, bridges, factories, houses, lineside structures and our exclusive catenary system.

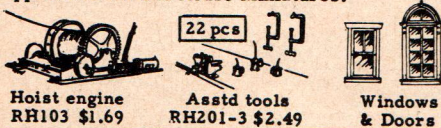
50c at your dealer or direct

A. B. BOYD CO.

1030 S. Grand Ave., Dept. R,
Los Angeles, Calif. 90015

ARE YOU A PERFECTIONIST ?

There are a few gifted people in this hobby who are able to produce an unbelievably fine product. Rollin is one of these rare individuals. If you are a perfectionist and want the finest detail (which admittedly costs a little extra) you will appreciate Rollins House Miniatures.



Hoist engine
RH103 \$1.69

Asstd tools
RH201-3 \$2.49

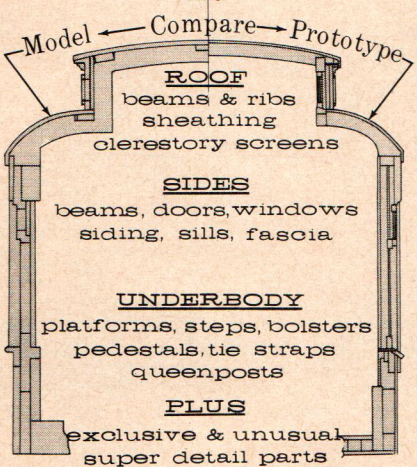
Windows
& Doors



Completely illustrated in Walther's 1966 HO Catalog (\$1.00) or send a stamped envelope for a Rollins House tear sheet.

WM K WALTHERS INC
1245 N WATER ST DEPT RMC MILWAUKEE WIS 53202

NEW Exciting NEW Construction Concept in HO



build - just like prototype and create an authentic miniature of your favorite 1890 Elegant Limited

Parts!! 160+ per car

First train: 4 car SP
"SUNSET LIMITED"
See photos page 199 of
"SOME CLASSIC TRAINS"

* Send 35¢ for catalog * See your dealer
sheets & sample parts or order direct

Westwood

P. O. Box 2412, Station C,
Fort Wayne, Indiana 46807

Phoenix Weather
Partly cloudy with possible rain and
strong winds. Today's high
near 80. Tomorrow's temperature
high 80, low 70. Sunday high 80,
low 70. Details Page 10.

THE ARIZONA REPUBLIC

Today's Chuckle

The trouble with America's foreign
relations is that so many of them are
foolish.

77th Year, No. 87

TELEPHONE: 21-0000

Phoenix, Arizona, Friday, August 12, 1966

80¢

c

Ten Cents

In North Viet Tasks

50,000 CHINESE HELPING HO

Headline from August 12, 1966 issue of Phoenix' "Arizona Republic" brings to mind the good old days when HO was also referred to as a breakfast cereal by the O gaugers. But how can they buck this?

photos excepting the cover silhouette are in full color. This catalog is a must for all serious HOers.

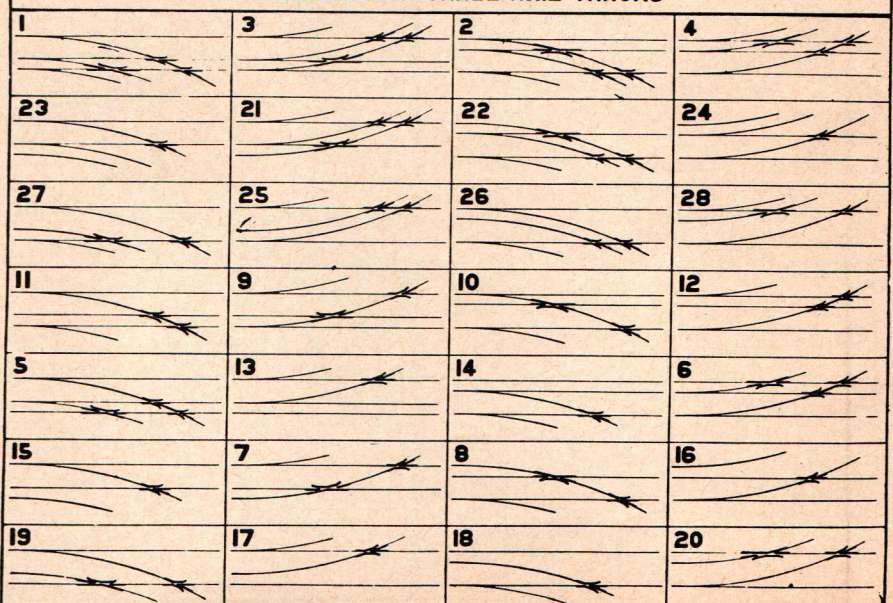
Edwin P. Alexander, Upper River Road, Yardley, Pa. advises that only the toy train collection has been sold, with a large scale and semi-scale collection of quarter inch (O) equipment totalling 70 locos and 300 cars and a large Ives O gauge collection still intact. However, the museum is only open weekends and it is advisable to arrange an appointment beforehand. A stamped addressed envelope brings Ed's list of loco and car plans, Pennsy photographs, and scale model (1/4") fork lift trucks.

William K. Walther's, 1025 N. Water St., Milwaukee, Wisconsin 53202, for model railroaders. PLD-4 Prototype Lettering Diagrams supplements the earlier books with more car and loco diagrams, and is strong on newer type cars and locos. Lists at \$3.00, 80 pgs, spiral bound, 5 1/2 x 8". The second title is the Railroad Paint Index and Color Mixing Guide, 24 pages, 5 1/2 x 8", saddle stitched. A limited edition volume of 2000 copies, each one numbered. Specific paint colors for 86 railroads are included, along with suggestions for mixing Floquil paints to achieve the

exact shade required. For example, eight different shades of yellow are listed, along with eight reds, seven oranges, nine greys, thirteen greens, seven blues, and four browns. That the color mixing can be complex is seen in the formula for the Yellow, designed as Y-7: 2 parts No. 31 reefer yellow, 16 parts No. 11 white, 2 parts No. 30 reefer orange, and 1 part No. 41 light green. This color is used on certain Texas & Pacific equipment. Gathering the data for the many different formulas necessitated the hiring of an artist trained in color matching and required three years of intensive research. Paint chips and other data were used in the compilation and a number of false starts were caused by color transparencies badly off color. At \$3.00, a fair price for what could be a most valuable reference.

Sattler's HO Depot, 1510 Cedar Ave., Cincinnati, Ohio 45224, has made a chart showing some 28 different turnout possibilities involved with dual gauge trackage having three rails, which we reproduce on these pages in reduced size because of its special interest to all narrow gauge fans. Any of these switch types are available

DIAGRAMS SHOWING THE 28 POSSIBLE TURNOUT CONDITIONS INVOLVED WITH THREE-RAIL TRACKS



from Sattler's, custom built to your specifications. Descriptive literature of the entire Sattler custom switch line in either code 70 or 100 is available for a stamped addressed envelope and make it a big No. 10 size. Sattler, incidentally, had to up their prices 20% effective Sept. 1, 1966, because of rising raw material and overhead costs.

Trolley Talk Vol. 2, containing issues 21 through 40, of Rich Wagner's popular trolley modeler's journal, has just been issued as a bound volume, saddle stitched, 8½x11, 136 slick pages, \$6.00. Published by Wagner Car Company, 59 Euclid Avenue, Wyoming, Cincinnati, Ohio 45215.

Northwest Short Line, Box 423, Seattle, Wash. 98111, offers several data sheets covering various of their HO imported brass locomotives free to any modeler sending in a stamped addressed envelope, large size preferred.

Central Locomotive Works, 2705 Honey Road, Lake Park, Florida 33403, clearing out their Southern P-34 Pacific kits which are loaded with lost wax fittings and parts. Kit lists at \$175 complete and is available in budget priced sections. Also going fast is the Alco 2000 hp. passenger diesel used on railroads from coast to coast for many crack trains. Available in both A and B sections. Dual powered A unit kits lists at \$126.00. A large stamped addressed envelope brings full information on these locos, as well as other Central Locomotive Works loco kits, power trucks, and automatic couplers for O scale.

Another HO cow and calf is coming, this time in all brass Japanese import, model TR-6 1600 hp., from Trains, Inc., 5710½ W. Diversey, Chicago, Ill., with power to all eight axles. Model will have satin finish and is equipped with separate brake shoes and hangers. A&B combination, \$54.95. Powered A loco, \$29.95. Powered B cabless unit, \$27.95. An HO General Electric U-50 is also due from Trains Inc. in December, in brass at \$49.95. This 5000 hp. monster measures 80 scale feet in length. Also coming up are more brass cabooses: Santa Fe wood off-center cupola, Great Northern wood off center cupola, Espee ACF bay window 1937 type, and a big Electro-Motive E-9 A unit.

Some new TT items from Gamco Products, 2027 Chambers Drive, N. E., Huntsville, Alabama 35811. Included are TT people from Preiser and Merten (Germany), and an 0-8-0 side tank team loco by Zeuke, of Berlin, Germany. Printed literature is available for a large stamped addressed envelope. Test Track reviews on these new items are coming up.

Cinders & Smoke, by Doris Osterwald, published by Western Guideways, Inc., Denver, Colorado, is another book on the D&RGW, covering the line from Durango to Silverton. This one is somewhat different, giv-

ing information on the geology and history of the area, the foliage to be seen, and the equipment to be ridden. Included are many rare old views and some new ones. This 96 page book at \$2.25 postpaid should be especially sought by modelers looking for accuracy in their scenic rendering. Available from RMC's Reader Service, 6 East Main St., Ramsey, N. J. 07446.

Champion Decal Company has raised the price of its Freight Car Lettering Plan Book No. 2 to \$3.75. This one, previously reviewed in RMC, is a gem, beautifully printed, and a most valuable reference for any modeler.

Price hikes on a number of model railroad items can be expected as

THE source of prestige products for the discriminating modeler!

Yes, We're Headquarters for All the New U. S. Hobbies O Scale KTM Cars & Locos

Write for latest listing.
HO & On3 to follow

Come in and see them, or
write direct to

THE ALL-NATION HOBBY SHOP
220 W. Madison St. Chicago, Ill. 60606

model railroading is a SNAP

WITH THESE ATLAS REFERENCE BOOKS AS YOUR GUIDE. These popular "how-to-do-it" books give you the answers to just about any model railroading (or HO motoring) question or problem. You can get dozens of terrific layouts, too — all illustrated with step by step assembly plans. **SEE YOUR DEALER... OR MAIL THE COUPON BELOW.**

NEW KING-SIZE HO RAILROAD PLAN BOOK is the sensational new Atlas book that measures a big 3 ft. across when opened up. No one... not even ATLAS — has ever offered this kind of gigantic, king-size (2" to the foot scale) reference book — with such an abundance of photos, sketches and easy to follow instructions on every phase of HO railroading PLUS six all-new railroad layouts with complete step by step instructions. **\$3.00**

"CUSTOM-LINE" LAYOUT BOOK Here's the one fact-filled book that gives you the answers to every phase of scale trackwork and layout. Tells you exactly what-to-do and how-to-do-it... with every detail beautifully illustrated. 48 pages, magazine size. **\$1.00**

"WIRING YOUR HO LAYOUT" First time published in one complete, easy to follow reference book! It covers and simplifies almost every phase of HO scale layout wiring. Electrical work becomes a "snap" with this book as your guide. 48 pages, magazine size. **\$1.00**

"6 HO RAILROADS" Six of the finest "HO" scale layouts that you can build... with the most complete and detailed step-by-step instructions. Absolutely no guesswork! Every step of each layout is fully explained. Book is 48 pages, magazine size. **\$1.00**

"HO" SCALE MOTORING LAYOUT MANUAL. A comprehensive layout book... with 50 exciting motoring and racing layouts. Also includes tips and hints on wiring, testing and trouble-shooting... as well as combining with HO model railroad layouts. **25c**

SNAP-TRACK LAYOUT BOOK Here's the sensational 32 page booklet that everyone's talking about. It shows you how to assemble and wire 12 excellent layouts. It's loaded with pages of tips and hints on the use of famous Atlas Snap-Track products. Illustrated. **25c**

SEE YOUR DEALER FIRST

If dealer cannot supply the books you want, then mail this coupon.

ATLAS TOOL CO., INC.
378 Florence Avenue, Hillside, N. J.

N.J. Residents,
Add 3% Sales Tax

Gentlemen: I tried several dealers and cannot order the following books. I enclose \$_____ (sorry, no stamps) for the book or books checked below.

NAME _____ (Please Print)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

KING-SIZE
LAYOUT
BOOK

\$3

CUSTOM
LINE LAYOUT
BOOK

\$1

WIRING BOOK

\$1

6 RAILROADS

\$1

HO MOTORING
LAYOUT BOOK

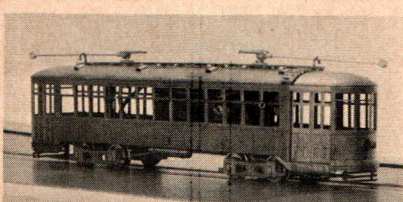
25c

SNAP-TRACK
LAYOUT BOOK

25c

RAILROAD MODEL CRAFTSMAN

This Holiday Season treat yourself to a brass model in HO of the last standard streetcar of the Twenties still in operation in New Orleans!



Kit No. 378, New Orleans 800 Class in brass powered by a 5 pole DC 195 type motor, twin axle drive, brass Brill 77E sideframes MTS trolley poles, RTR, but unpainted\$26.75 postpd.

Special Direct Mail Offer valid until December 10, 1966—buy two New Orleans No. 800 Class kits for only \$42.50.—Hurry!

MTS Catalog \$1.00 Refundable

Order from:

MODEL TRAMWAY SYSTEM

P.O. Box 111, Wilton, Conn. 06897

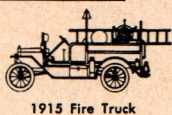
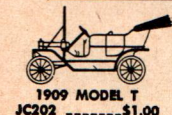
or

PACIFIC TRACTION

P.O. Box 17133, San Diego, Calif. 92117

NOW BACK IN STOCK
JORDAN
HO HIGHWAY MINIATURES

Complete line now in stock. Send stamp, addressed envelope for list.



HORSE/HARNESS
JB-2 (Set 2) ---- .50

W M K WALTHERS INC
1245 N WATER ST DEPT RMC MILWAUKEE WIS 53202

manufacturers pass on to the consumer the skyrocketing costs of doing business. Higher taxes, new state taxes, increased social security and increased withholding and other higher costs have increased prices up and down the line.

We might recommend as a best buy, a subscription to *Railroad Craftsman*, still pegged at \$5.00 per year just as it was back in 1954 and, to quote an ever increasing number of RMC readers, an infinitely better buy than it was back in those days. Most copies to subscribers are mailed in sealed poly-bags, waterproof and pilfer proof.

**R
M
C**

TIMETABLE

NOTE: Items for RMC TT are welcome but must be received 6-8 weeks before issue in which item is to be inserted. Please print or type.

Club Shows

WESTFIELD, N. J. Nov. 18, 19, 20, 25, 26, 27, Dec. 2, 3, 4. Central Jersey Model Assoc. Annual Exhibit, 135 Elm St. O Gauge RR, Trolley & Interurban. Hours: Fri. 7-9 PM; Sat. 2-5 PM, 7-9 PM; Sun. 2-5 PM. Adm. Children 25c, Adults 50c.

AUBURN, N. Y. Nov. 19, 20. Cayuga Valley Model RR Club Annual Open House. Cayuga County Museum Annex, Genesee St. 2-5 PM. Adm. Donations accepted. Info, contact Jean Houde, 40 Linn Ave. Auburn, N. Y. 13021.

MURRAY HILL, N. J. Nov. 23. Organizational meeting, 94 Oakwood Dr., Murray Hill at 8 PM. All tractions fans interested in completing construction & operating existing large HO traction line welcome. Info, contact Charles F. Gerow, 263 Clark Ave., Staten Island, N.Y. 10306

MURRAY HILL, N. J. Nov. 19. Garden State Div. NER, NMRA Meet, Summit-New Providence HO RR Club, Inc., 94 Oakwood Dr., Murray Hill, at 1 p.m. Clinic, followed by session on club layout. Reg. fee \$1.00. Pre-meet luncheon, 11:30 AM, Snuffy's, Scotch Plains. Info, from Bob Escoffier, 312 Gallo-wae, Westfield. 232-7535.

ELGIN, ILL. Nov. 18, 19, 20. Valley Model RR Annual Open House, south on Illinois Rte. 25 to Kenyon Rd. HO & HO3 oper., layout, refreshments, displays. Adm. free, donation bowl. Hours: 7-10 PM, Sat. & Sun. 2-10 PM. Contact Ken Priest, 503 Park Blvd., Streamwood, Ill. 60103. Phone: 837-8457.

PORTLAND, ORE. Nov. 12, 13, 19, 20. Columbia Gorge Model RR Club Annual Show, 3405 North Montana Ave. HO Ga. Columbia Gorge Lines in full op. 1-8 PM each day. Adm. Adults - 50c; Children under 12 - 25c. Info, write Charles Storz, Jr. at club address.

CAMDEN, N. J. Nov. 25, 26, Dec. 2, 3, 9, 10. Silver Valley RR Club Annual Show, Central Branch YMCA, 614 Federal St., Camden, HO, HO3 layout. Hours: Fri. 7:30-10 PM; Sat. 12 Noon-5 PM. Contact Charles Carangi c/o Club.

NEW HAVEN, CONN. Nov. 4, 6, 11, 13, 18, 20. New Haven Society of Model Engineers Fall Show, 90 Court St. Hours: Fri. 7:30-10:00 p.m.; Sun. 2:30-5:30 p.m. Fare: Adults 50 cents, Children 40 cents.

LONG ISLAND CITY, N.Y. Nov. 4. Empire Model RR Assn. Annual Auction, Basement 34-05 44th St., at 7 PM. Bring your HO equip. or RR books to sell, trade or auction, free of charge. Contact Hal Fletcher, 42-64 65th Pl., Woodside, N. Y. 11377. Phone: (212) IL 7-6236.

LOS ANGELES, CALIF. Nov. 12. Los Angeles Div., PCR-NMRA annual layout tour, starting at Pioneer Western Club, 7426 Orange-thorpe, (rear), Buena Park, Calif., at 10 AM. Features club & private layouts. Info, contact R. J. Jefferys—776-3411.

WILLISTON PARK, L.I., N. Y. Dec. 9, 10, 11. Nassau Model RR Club Christmas Show, 174 Hillside Ave. Hours: Fri. 8-10:30 PM; Sat. 2-4:30 PM. 8-10:30 PM; Sun. 2-5 PM. Info, contact George Hatfield, Jr., 143 Laurel Dr., New Hyde Park, L. I., N. Y.

MERCHANTVILLE, N. J. Nov. 4, 5, 11, 12. Cherry Valley Model RR Club Annual Show, basement of Grace Ep. Church, cor. Maple Ave. & Centre St., 1-9 PM. Op. O ga., 1/4 scale, 2 rail. Adm.—donation.

CHATHAM, N. Y. Nov. 20. Harlem Valley RR Club big Model Show, Chatham Bowl Rte. 66, at 3 PM. All ga., movies, visits to local layouts. Info, contact Richard Luckin, 44 Kinderhook St., Chatham, N. Y. (518) CH 2-3089.

BROOKLYN, N. Y. Oct. 21, 22, 23, 28, 29, 30. Nov. 4, 5, 6. Bay Ridge Model RR Club Show, 28 Marine Ave. at 93rd St. Hours: Fri. 7:30-10 PM; Sat. & Sun. 2-6 PM. O ga. RR & Trolley. Adults: 50c, Children: 25c.

FORT WAYNE, IND. 46808, Nov. 23. Fort Wayne Model RR Ass'n. Inc. Open House, 1429 St. Marys Ave. O and HO scales. 7:30-10:30 PM. Adm. free. Info. Michael D. Grogg, 7625 Worth Dr., Fort Wayne, Ind. 46809 Phone: 747-2650.

PHILADELPHIA (Suburbs), Pa. Dec. 3, 4, Jan. 7, 8, 14, 15. GATSME Lines Open House, Pennsylvania & Weldy Aves., Oreland, Pa. One mile east of Pa. Turnpike, Fort Washington exit. HO & HO3 Progr. & Rte Cab Control. 1-6 PM. Contact L. A. Paakh, 216 Buttonwood Way, Glenside, Pa. 19038.

Club Notices

JACKSONVILLE, FLA. Gateway Model RR Club now located on 2nd fl. Jacksonville Union Station, N. E. cor. Mailing address: P. O. Box 2531, Jacksonville, Fla. 32203. Meet Tues. & Fri. from 7:30-11:30 PM. New members welcome.

WAYNE, PA. New club forming on Philadelphia Main Line. Info, contact Richard E. Bradley, 421 E. Lancaster Ave., Apt. C2, Wayne, Pa. 19089.

LONG ISLAND CITY, N. Y. Empire Model RR Assoc. welcomes new members over 21. Meet every Tues. at 8 PM, basement entrance 34-05 44th St. Visitors welcome first Tues. of month, op. night. Info, contact Hal Fletcher, 42-64 65th Pl., Woodside N. Y. 11377, or Wayne Foote, 37-68 64th St., Woodside, N. Y.

Fan Trips

LOS ANGELES, CALIF. Nov. 6, 10th Anniversary of Hi-Level equip. on Santa Fe will be celebrated by Pacific RR Soc. w/special Hi-Level train from L. A. to San Diego & return, leaving L. A. Union Station at 8 AM. Photo stops & side trips. Info, contact Pac. RR Soc., P. O. Box 5279, Los Angeles, Calif. 90055.

Campbell Signal Monitor

A compact, SOLID STATE unit, using SPACE AGE components to:

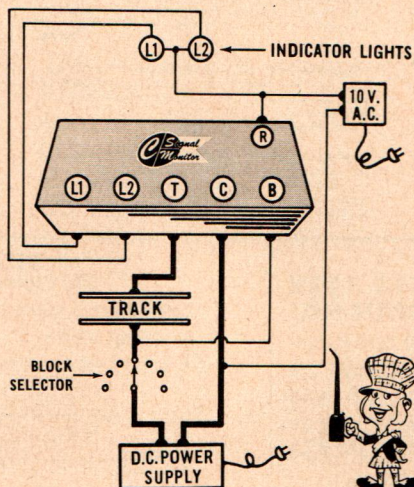
SHOW where any engine or lighted car is on your layout. (Any scale: HO-N-TT-S-O.)

INDICATE OCCUPANCY even when the track power is off. When track power is on, it ALSO shows direction of travel (polarity).

Signal Monitor is EASY TO INSTALL—RUGGED—ADAPTABLE to any track power system. Can be installed one block at a time, and others added later. It is wired into one side of the track circuit, and separately powered by an inexpensive 10 v. door bell transformer. (One transformer for the whole system—not furnished).

COMING SOON . . . #501 Campbell SIGNAL MONITOR . . \$12.95

At your dealer's. See also all the fabulously realistic Campbell kits. Send 35c (coin) for the complete, illustrated Catalog #4.



Campbell Scale Models

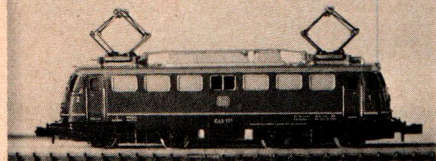
P.O. BOX 121C, TUSTIN, CAL. 92680



MINITRIX electric

OOO/N
GAUGE
TRAINS

1901 Old Timer Passenger Set	\$19.95
1902 Old Timer Freight Set	19.95
1903 Express Train Set	34.95
1904 Transcontinental Express Set	34.95
2980 Rail Bus & Trailer	19.95
2914 Old Timer Locomotive	9.95



2930 Electric Loco, with operating pantographs and reversing headlights, a jewel blue	19.95
2931 Electric Locomotive, same features as 2930, blue cream	19.95
2932 Electric Locomotive, same features as 2930 green	19.95
3010 Baggage Car, green	3.25
3011 Express Coach, green	3.25
3012 Dining Car, red	3.25
3013 Tourist Coach, blue	3.25
3014 Luxury, blue-cream car	3.25
3229 ESSO Tank Car	2.50
3230 Gasoline Tank Car	2.50
3233 DEA Tank Car	2.50
3232 BP Tank Car	2.50
3235 Stake Car, brown	2.50
3237 Lumber Car	2.50
3261 4-axle MOBIL Tank Car	3.50
3262 4-axle SHELL Tank Car	3.50
3263 4-axle ARAL Tank Car	3.50
3264 4-axle FINA Tank Car	3.50
3297 Six-axle Depressed Center Car	3.50
4922 Full curved Track, 9" rad.	.30
4924 4/5 curved Track, 9" rad.	.25
4926 1/5 curved Track 9" rad.	.22
SL300X Flexible Track, 36" (min. six pieces)	1.35
MINITRIX Catalog	.35

KIBRI N-GAUGE BUILDING KITS (*new models)

7001 Two Hay Barns with Fence	\$.95
7002 Two Alpine Chalets	1.95
7003 Two Mountain Lodges & Store	1.95
7004 Alpine Village w/Church	4.95
*7040 Chalet "Beckenried"	1.95
*7042 Two Chalets "Lenk"	2.50
*7050 Emmentaler Cheese Factory	3.95
*7060 Alpine Hay Barn, large	1.50
7200 Automatic Crossing Gate, single	1.95
7210 Automatic Crossing Gate, double	2.50
7400 Modern Railroad Station	5.95
7500 Station Platform	2.50
9782 Rustic Church	1.95

KLE-WE N-GAUGE BUILDING KITS

101 Switch Tower w/Staircase	\$1.98
121 Freight Depot w/Dock	2.98
140 Railroad Station w/Platform	3.98
142 Station Platform	2.50
021 Open Freight Shed in bag	.59
042 Platform Parts in bag	.59
097 Freight Load in bag	.59
099 Ass't'd. Tracksides Accessories	.59
Combined KIBRI-KLE WE catalog	.35

PECO N Gauge Flexible Track

SL300X Nickel-silver flex-track, 36" minimum order six pieces)	\$1.35
N-100 Foam roadbed for above 25' rail	1.98
SL310X Nickel-Silver Rail Joiners, 24"	.49
SL311 Nylon insulating Rail Joiners, 12"	.49
SL340 Snap-on Rail Bumper, 2 in bag	.49
SL338X High-speed Turnout, right	3.50
SL339X High-speed Turnout, left	3.50
SL79 Switch Machine for sub-surface mount	1.50
PECO is compatible to Minitrix & Arnold-Rapido	

KIBRI HO-GAUGE BUILDING KITS (*new models)



*8101 Six-flat Apartment Building	\$1.95
*8102 Nine-apartment Building	3.50
8111 Apartment House with Stores	2.50
8113 Apartment Block with Stores	4.75
8200 Office and Commercial Building	4.95
8210 High-rise Office Building	4.50
8300 Old Town Hall	4.95
8302 Corner Building - Store	2.50
8304 Two Old-town Business Buildings	3.25
8306 Two Old-town Buildings	2.75
*8310 Bank Building	2.25
*8312 "Dordrecht" Hotel-Restaurant	2.95
*8314 Three-story Corner Building	2.95
*8320 "Geleen" Town House	1.95
*8322 "Geleen" Duplex Town House	2.75
*8324 "Geleen" Suburban Home	2.75
*8330 Country Estate House	4.50
*8900 Double-Track Tunnel Kit	4.50
*8902 Single-Track Tunnel Kit	6.50
9000 Brandzoll Castle w/Mountain	6.50
9452 Tool Shed w/Track Bumper	1.75
9472 Trackside Phone Booth	.50
9487 Rustic Signal Tower	2.50
9490 "Ibach" Station	2.95
9492 "Wilderanna" Station	3.25
9501 "Laufenmuehle" Station & Annex	6.50
9504 "Hausen" Station	4.95
9532 Station Platform	1.95
9602 Bridge Crane	2.95
9613 Foot Bridge with Stairways	3.95
9680 Steel Bridge, straight	1.95
9682 Steel Bridge, curved	1.95
9694 Girder Bridge, small	2.95
9696 Girder Bridge, large	4.95
9698 Temporary Bridge	2.95
9767 Gothic Church	3.50
9901 Office & Tank-Truck Fill Point	2.50
9902 Barrell Filling Point	2.50
9904 Large Storage Tank	2.50
9906 Small Storage Tanks	2.50
9908 Rail Tank Car Filling Point	1.25
9921 Two Cable-Drums on base	.65
9922 High-voltage Transformer	.75
9924 Utility Transformer Station	3.95
9925 Complete Utility Transformer and Distributing Station	9.95
9930 Locomotive Repair Shed	6.50
9995 KIBRI plastic Cement w/brush	.49
Complete KIBRI catalog & price list	.35



ROKAL TT GAUGE MODEL TRAINS

"Boy" Set #01102, contains O-6-O loco, two freight cars, oval of track with terminal track, transformer and speed regulator, just right for the beginner.	\$17.95
"Prima" set #01103, contains O-6-O loco, tank car, gondola, box car, oval of track, terminal track, transformer and speed regulator, ready-to-run at	\$21.95
01105 Passenger Train Set, contains O-6-O loco with three headlights, baggage car, two coaches, track oval, multi-train transformer, and speed regulator, at	\$31.95
01107 Freight Train Set, contains 2-6-O loco with 3-axle tender, box car, tank car, caboose, track oval with terminal track, multi-train transformer, and speed regulator, at	\$33.95
Santa Fe or Union Pacific Diesel Loco	\$15.95
O-6-O Tank Loco	\$9.95
4-6-2 Loco & 4-axle Tender	\$19.95
2-10-2 Locomotive, heavy freight	\$21.95
Electric pantograph Locos	\$18.95
Send for ROKAL catalog at	.60c
ROKAL Technical Manuals	.75c
ROKAL Track Layouts Manual	.75c

HOBBIES ★ ★ MODELS ★ ★ NRP ★ ★ ★ IMPORTS ★ ★ ★



Famous VIKING precious HO vehicles, finished, with windows, chip-proof, finished bottoms with transmission, differential, exhaust system and gas tanks showing, highly detailed, truly the finest in the field.

(*new models)

1n New Jeep w/Hitch	\$.50
2n Jaguar XKE	.50
3 Volkswagen sedan	.50
3g Karmann Ghia	.50
4v Volkswagen Variant St. Wagon	.50
7n Opel Station Wagon	.50
8r Opel Rekord sedan	.50
9 Fiat 1800 sedan	.50
10 Land Rover with top	.50
*11a Opel Admiral w/springs	.50
14b Mercedes 230SL	.50
*14s Mercedes 220SE	.50
*15 Mercedes 300 sedan w/hitch	.50
15a Mercedes 600 w/springs	.65
16 Porsche convertible	.40
16c Porsche Carrera	.50
18i Borgward sedan w/hitch	.40
20b Ford Taunus 12m	.50
21 Lincoln Continental	.50
*22m Chevlie Malibu w/springs	.65
23 Mercedes 300 SL coupe	.50
25c Mercedes 190 SL coupe	.50
27v Mobile Catering Truck	.80
*29m Volkswagen Repair Car	.50
29d Volkswagen double-Cab Pickup	.40
31 Volkswagen Bus	.50
*34 Hanomag Pickup	.65
*34k Hanomag Repair Truck w/parts	.65
35k Opel Service Truck	.50
36w Service Truck w/crane	.80
38 Tractor w/hitch	.50
39 Logging Truck/trailer	1.00
41g MAN Army Truck, olive	.95
41f Henschel dbl-Cab over Engine	1.25
41p Henschel Cab over Engine	1.25
41n MAN Cab over Engine Panel	1.25
42 Coal Truck w/load	.50
42k Dump Truck, heavy	.75
43f Cab over Engine Pickup	.85
44 Chevrolet flat-body Truck	.65
44d Chevrolet Stake Body Truck	.75
*44n International Loadster Truck	.85
49a GMC Truck-Trailer	1.00
49s Truck w/heavy equip. Trailer	1.50
51g Cab over Engine Trac/Trailer	1.50
51h Tractor/Trailer 14 wheels	1.50
52 Refrigerator Trac/Trailer	1.00
*51m Magirus 235 D Semi	1.95
52a GMC Tractor only	.60
53k Shell Tank Truck	.85
53n Chemical Tank Truck 14 wheel	1.50
56 Coca Cola Truck	.75
57 Milk Truck w/cans	.75
58 New Car Transporter	1.50
59 16 wheel House Mover & Truck	1.50
60 Fire Chief's Car	.50
61 Fire Engine Pumper	.75
62 Fire Engine Ladder Truck	.75
62r Fire Disaster Unit	1.00
63n New Tow Truck	.85
64k Snow Plow Truck	.85
64m Garbage Truck w/Pails	.75
*65h Hanomag Powered Scoop	1.25
65p Bulldozer	1.00
66 Power Shovel, moveable scoop	1.50
66m Mobile Crane, wheeled	1.50
67 Heavy Duty Dump Truck	1.25
*67m Heavy Duty Dump Trailer	1.25
*67s Dumping Tractor/Trailer	1.50
79 ESSO Super Tank Truck	1.50
*80s Shell Super Tank Truck	1.95
81s Shell Gas Station	1.00
104 Police Squad Car	.50
116 Electric Baggage Truck	.50
117 Fork Lift Truck	.50
VIKING catalog & price list	.35

MODEL SHIPS:



Over 700 models of 1:1200-1250 ships, from HANSA, NAVIS, VIKING, MERCATOR, DELPHIN, STAR, SCHLINGELHOF, MERCURY and others.

SEND 35c FOR ILLUSTRATED CATALOG AND PRICE LIST, IMMEDIATE DELIVERY.

NATHAN R. PRESTON & CO.



Des Plaines, Illinois 60017

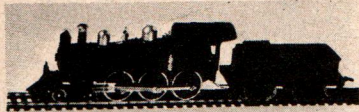
P.O. Box 187

POLKS HO ARISTO-CRAFT

Aristo Loco
Catalog, HO15c

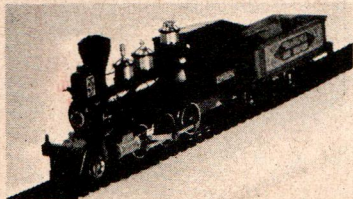
HISTORIC LOCOMOTIVES

Your Choice
each \$1388



4-6-0 B&O R.R. "ROYAL BLUE"

No more famed or more beautiful fast 4-6-0 Ten-Wheeler type ever ran this, the loco that once hauled the immortal "Royal Blue" passenger limited. Entirely typical of the locos used by all railroads in the memorable classic era, this model is particularly striking in its authentic livery of royal blue. Comparable Value \$24.95



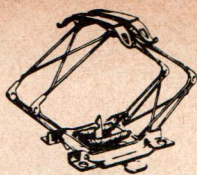
2-6-0 CIVIL WAR "THOMAS ROGERS"

Here's a 2-6-0 Mogul type with all the romantic detail of a typical locomotive of the 1850's and Civil War period. Extraordinarily colorful with its true-to-era decoration and lining. Compared to other Civil War period models this 2-6-0 is a veritable monster. An accurate and detailed replica of a "big" engine of a most fascinating period in American railroading. Comparable Value \$22.95



2-4-2 "COLUMBIA" 1893 WORLD'S FAIR WINNER

This compound locomotive was built by Baldwin as the "last word" in speed for the 1893 Columbian Exposition, and gave her name to this type wheel arrangement. Her wheels were so big as to require semi-circular covers on the pilot platform and running boards. One of the first locomotives to support a larger firebox on a trailing truck. Comparable Value \$27.95



OPERATING
HO
PANTOGRAPHS
69c Ea \$6 Per Doz

This item is always in demand — by railroaders who operate from overhead wires, and by those who use regular track pickup — but want to "doll up" electric type locomotives, multiple-unit cars, interurbans, trolley cars, etc. These are the neatest pantographs imaginable; full working with double tension springs, hold down clip and release lever. Beautifully crafted in brass. Whether used for actual operation or merely for extra realism, the collector plates are of long-lasting phosphor bronze. Priced so low — order by the dozen.

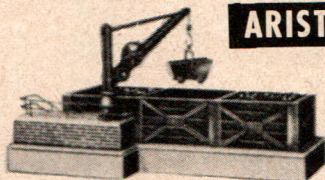
LINCOLN'S RAILROAD CAR NOW \$4.88

True-to-scale

this is an exact replica of car that carried Lincoln's body back to Illinois after his assassination. Was \$8.98



ARISTO-BUILDINGS



COAL DOCK with CRANE—An item used mainly around locomotive shops and freight yards. (approx. 4 1/4" x 2 1/2" x 2 3/4")

No. 611B KIT \$1.95

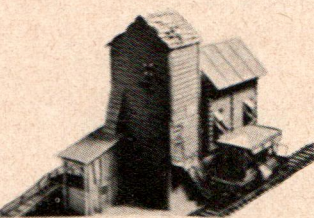
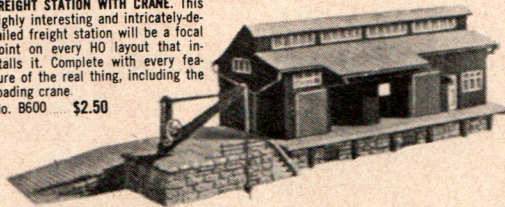
PIPE STORE HOUSE

Every railroad needs the facility for handling various types of drain pipes and culverts used along the right-of-way. (approx. 5" x 2 1/2" x 2 3/4")

No. 612B KIT \$1.29

FREIGHT STATION WITH CRANE. This highly interesting and intricately-detailed freight station will be a focal point on every HO layout that installs it. Complete with every feature of the real thing, including the loading crane.

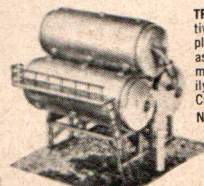
No. B600\$2.50



SAND & GRAVEL LOADER—This model is the epitome of "true to nature" representation. Operates automatically through electro-mechanical device. (approx. 4 1/4" x 1 1/8" x 6")

No. 617 Ready-Made \$17.50 • No. 617B KIT \$8.95

Vollmer



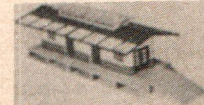
TRIPLE HORIZONTAL TANK. A distinctively different design tank to complete your model refinery, or for use as an independent unit. Precision-molded colored plastic parts are easily assembled in this kit by Aristo-Craft. Instructions included.

No. B-513\$3.50

WEIGHING SHED

Typical small shed used for scales and other equipment.

No. 613B Kit form . . .98



FREIGHT STATION. A beautifully designed and detailed big freight station for locations where lots of freight is handled. Detailed plastic parts give this plenty of realism, including transparent roof overhang, clerestory, and many doors. Available both assembled and in easy-to-put-together kit form. Made by Aristo-Craft. 12 1/4" x 3 1/4"

No. B9453 Kit\$1.50

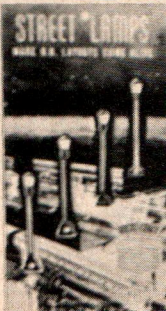


CATHEDRAL. Another of the very finest miniature buildings ever offered to HO gauge model railroaders. Minutely detailed in every respect, including transparent imitation stained-glass windows. Fine lines proclaim the thought and designing skill that went into this truly superb miniature. Precision-molded plastic construction. Available either in assembled form, or as an easy-to-put-together kit. For the hobbyist who insists on the best and most realistic. Made by Aristo-Craft. 8 1/4" x 9 7/8" x 4 1/2"

No. B9767 Kit\$2.50

DISTINCTIVE MINIATURES! READY-TO-USE!

Most of these lamps are of ALL-METAL construction with replaceable bulbs. The most popular styles, usable in any type layout are offered.



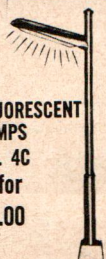
GAS LAMPS

NO. 2C
4 for
\$1.00



PARK LAMPS

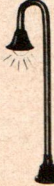
NO. 10C
4 for
\$1.00



FLUORESCENT
LAMPS
NO. 4C
3 for
\$1.00

GOOSENECK LAMPS

NO. 1C
3 for
\$1.00

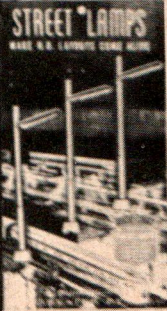
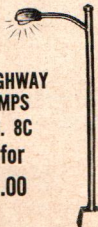


STREET LAMPS

NO. 3C
4 for
\$1.00

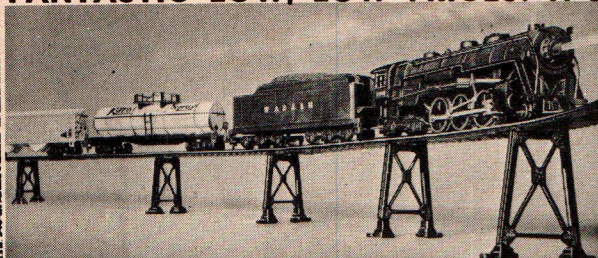


HIGHWAY
LAMPS
NO. 8C
3 for
\$1.00



BIG SAVINGS! up to 60%

FANTASTIC LOW, LOW PRICES! IT'S UNBELIEVABLE!



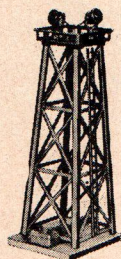
TRESTLE BRIDGE SET

The easy, realistic, way to run your trains up and over! Includes 30 graduated trestle pieces and ramps, plus girder bridge section. You can save \$2.00 by ordering now.

Reg. Price \$3.98
No. 25203 — Sale Price \$1.98

ACCESSORIES

	Reg. Price	SALE PRICE
35212 Crossing Gate	\$4.98	\$ 2.49
35214 Crossing Watchman	6.98	3.49
35759 Drum Loading Conveyor	9.98	4.98
35780 Loader	5.98	2.98
35785 Coal Loader	4.98	2.59
32654 Rectifier 3 Amp.	7.98	3.98
32661 Powerpack 1 Amp.	10.95	4.39



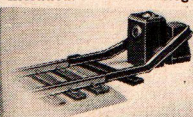
ORDER ALL ITEMS BY NUMBER

No. 35207 — **FLOODLIGHT TOWER.** Includes two floodlights in bright metal housings that swivel to any position. Uses A.C. or D.C., 12 to 14 volts. 6 1/2" high. At this price, order two, three, four.
Reg. Price \$2.98 Sale Price \$1.49



No. 35204 — **CROSSING SIGNAL.** Red lights flash as train passes crossing. No special track section needed.
Reg. Price \$2.98 Sale Price \$1.59

No. 35205 — **BLOCK SIGNAL.** Train stops on red, goes on green. May be wired for automatic operation by switch contacts, or manually with switch control included.
Reg. Price \$3.98 Sale Price \$1.98



No. 35202 — **BUMPER.** You'll need plenty of these for siding ends. Includes operating light. On this item we've cut the price in half.
Reg. 98c Sale Price 49c

ACCESSORY KITS

	Reg. Price	SALE PRICE
35255 Factory Kit (Lited)	\$1.29	\$.65
35274 Signal Bridge Kit	3.50	1.75
35253 Split Level House Kit (Lited)	.98	.49
35273 Highway Lite Kit (3)	1.49	.79
35273 Rotating Radar Tower Kit	1.98	.98
35275 Blinking Billboard Kit	.98	.49
35272 Truss Bridge Kit (Lited)	1.69	.89
35250 Dutch Colonial House Kit (Lited)	.98	.49
35271 Floodlite Tower Unit	1.49	.79
35254 Suburban Station Kit (Lited)	.98	.49
35252 Cape Cod House Kit (Lited)	.98	.49
35251 Ranch House Kit (Lited)	.98	.49
35270 Water Tower Kit (Lited)	.98	.49

HO ROLLING STOCK

	Reg. Price	SALE PRICE
33538 Missile Transport Car	\$3.98	\$1.98
33546 Jet Engine Transport	2.98	1.49
33115 Ballast Car	2.98	1.49
33506 Pennsy Caboose	4.98	2.39
33519 B & O Caboose	4.98	2.39
33536 Pennsy Flat Car	2.50	1.19
C3008 San Francisco Caboose	3.98	1.89
33621 Caboose	4.98	2.39
33623 M & St. L Caboose	4.98	2.39
33618 Erie Caboose	4.98	2.39
C1006 C & O Coal Car	2.98	1.49

THE SCALE MODEL LINE

33806 EXPLoding MINE CAR



33804 TNT CAR

ELECTRIC REMOTE CONTROL

ACTION CARS

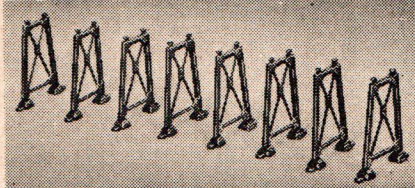
33820 Tie Jector Car



33818 GN Hay Jector Car

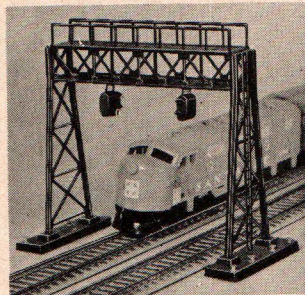


33812 Rocket Launcher Car



No. 35201 — **TRESTLE EXTENSION SET.** For use with No. 35203 Trestle Set. Includes 8 trestle sections, 2 3/4" high, to give you a longer span of high level trackage. Now at half price. Reg. 98c Now 49c

POLKS HO GILBERT



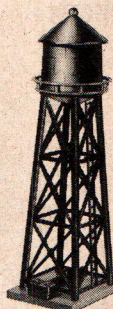
SAVE 60% AND MORE

ORDER BY NUMBER

No. 35274 — **SIGNAL BRIDGE.** Detailed operating model, for double or single track layout. Includes 2 control switches; trains AUTOMATICALLY stop on red, go on green. Kit form.
Reg. \$3.50, Sale Price \$1.75

ORDER NOW!

No. 25206 — **WATER TOWER.** Scale model, 7 3/4" high, adds realistic touch for industrial area on your pike. Red warning light on top.
Reg. \$1.98 Sale Price 98c

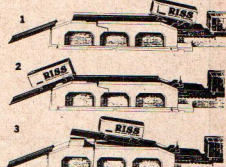


ACTION CARS

	Reg. Price	SALE PRICE
33804 TNT Car	\$7.98	\$3.19
33812 Rocket Launcher Car	7.98	3.19
33806 Mine Exploding Car	7.98	3.19
33818 GN Hay Jector Car	4.98	2.39
33820 Tie Jector Car	4.98	2.39

Piggy-Back Unloader & Car

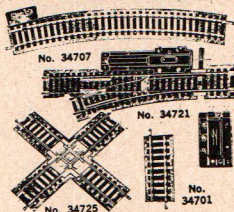
No. 35790 — This new accessory unloads hitch-hiking trailers AUTOMATICALLY. In picture #1 Flat Car backs into unloader, causing trailer to ride up ramp. Then, while Flat Car is hauled away to finish trip (Picture #2) Trailer is pushed down inclined ramp to street, to be unloaded. Unloading completed, trailer is pushed back up ramp again and Trailer Loader is tilted (Picture #3) to permit trailer to roll down to waiting Flat Car, which has returned from its trip. Set includes One Truck Trailer, Railroad Flat Car and Accessory.
Reg. Price \$4.98 Special Sale Price \$2.69



SPECIAL! SAVE BIG! HO PIKE MASTER TRACK BARGAINS

Three-In-One! Rails, Ties, Roadbed. Designed to work well with any other HO track on the market. Stock-up!

Never again at these low, low prices. Rush your order now while they last.



No. 34700 — HO 9" Straight Track Reg. 30c Sale Price 15c	No. 34720 — HO Electric Remote Control Switch — Right Hand Reg. \$4.98 Sale Price \$2.79
No. 34701 — HO 3" Straight Track Reg. 30c Sale Price 15c	No. 34721 — HO Electric Remote Control Switch — Left Hand Reg. \$4.98 Sale Price \$2.79
No. 34707 — HO Curved Terminal 18" Reg. 75c Sale Price 39c	No. 34722 — HO Manual Switch RH Reg. \$2.98 Sale Price \$1.69
No. 34711 — HO 1/2 Curved Track 18" Reg. 30c Sale Price 15c	No. 34723 — HO Manual Switch LH Reg. \$2.98 Sale Price \$1.69
No. 34712 — HO Curved Track 18" Reg. 30c Sale Price 15c	No. 34725 — HO 90° Crossing Reg. \$2.25 Sale Price \$1.19



SEND CHECK OR MONEY ORDER — NO C.O.D.'S PLEASE

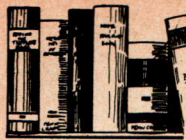
POLKS Hobbies

DEPT. RRMC 46)

314 FIFTH AVE. (32nd ST.) NEW YORK, N. Y. 10001

SEND FOR CATALOGS

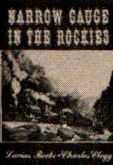
Old-Time Locomotives. Fully illustrated showing all unique historic locos & HO accessories. 15c
Collector's Military Figures. \$1.00
Aristo HO railroad, Radio-Control Catalog 35c



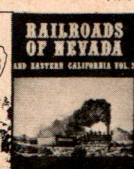
GREAT BOOKS

for model rails

A TRAINLOAD OF GREAT



656—PRR LOCO DIAGRAM BOOK. \$4.00
657—B&O LOCO DIAGRAM BOOK. \$4.00
658—ERIE RR LOCO DIAGRAM BOOK. \$4.00
162—LAST OF THE 3 FT. LOGGERS, Kreig. Story of the West Side Lumber and Hatchery and Yosemite Valley lines. 96 pgs. 190 illus. 8 1/2 x 11, hardboard. \$6.95



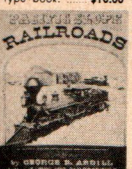
505—STEAMCARS TO THE COMSTOCK, by Beebe & Clegg. The Virginia & Truckee and the Carson & Colorado in picture and prose. A collection of rare old pictures and three oil paintings by Howard Fogg. 8x11, 100 pages, maps, over 120 illustrations. \$4.50

502—NARROW GAUGE IN THE ROCKIES, by Lucius Beebe and Charles Clegg. A large volume on slim pikes of Colorado, Utah, and New Mexico. D&RG, Moers short lines, DSP&P, F&CC, Utah, and RGS. 224 pages, 250 illustrations, 8x11, second printing. \$8.50



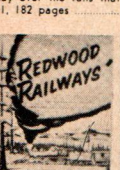
501—O&W, by William F. Helmer. The birth, the life, and the death of the railroad's rail road. 228 pages 6x9 with 150 photos, maps, timetables, and a complete motive power roster. Camelbacks, diesels, trestles: all beautifully depicted. "A must in every railfan's library" says Hal Canters of RMC. Dust jacket and frontispiece by Otto Kuhler. \$5.00

512 — BALDWIN LOCOMOTIVE WORKS, 1881 Catalog. Reproduction. A rich looking volume handsomely bound in brown with gold leaf lettering. Covers many of the locos produced by Baldwin with photos and data. Letters and comments on early BLW locos. 8x11, 153 pgs. A collector's type book. \$10.00



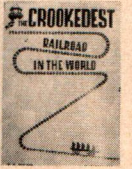
736—RAILS WEST, by George B. Abbill. The final volume in the Abbill rail trilogy. Chapter cover the Middle Border, Northern Plains South-Southwest, Rocky Mountains, and Pacific Coast. This book is loaded with page after page of rare steam loco photos, for those who love them. \$12.50

731 — PACIFIC SLOPES RAILROADS, by George B. Abbill. To the clank of link and pin, the pages carry the reader from Canada to Mexico alongside engineer Abbill in the old wooden cabs as little old trains buck and bowl over the plains, crawl up timbered slopes, and in and around treacherous mountain passes. Here are two dozen journeys into yesterday over the rails that built the West. 8 1/2 x 11, 182 pages. \$10.00



506—REDWOOD RAILWAYS, by Gilbert H. Kneiss. The story of the little roads which grew up into the Northwestern Pacific RR. 40 full pages of illustrations, 16 area maps, 2 pocket maps of entire system. Over 200 pages, 6x9. \$4.75

510—HISTORY OF NEVADA, Thompson & West. 1881. A reprint of a classic in its field. 1000 pages, 7x10 1/2, 280 illus., buckram. \$22.00

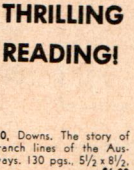
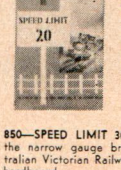


508—LITTLE RAILWAYS OF THE WORLD, Shaw. The story of the small gauge railroads: Romney, Talyin, and others. Unusual yet rail-ready. 270 pgs., 225 illus., 8 1/2 x 9 1/2, hard cover. \$6.00

514—THE CROKEDDEST RAILROAD IN THE WORLD, Wurm and Graves. History of the Mt. Tamapalis & Muir Woods Ry. in photos and text: Shays, Heislars, plans. Hard cover. \$3.75

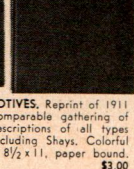
521—RAILROADS OF NEVADA, VOL. 1, Myrick. 50 railroads are covered in this first of 2 volumes of Nevada RRs. Beautifully printed. Special maps. \$12.50

527—RAILROAD OF NEVADA, VOL. 2, Myrick. Covering the Southern Roads in a deluxe presentation. Profusely illustrated. \$12.95

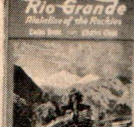


850—SPEED LIMIT 30, Downs. The story of the narrow gauge branch lines of the Australian Victorian Railways. 130 pgs. 5 1/2 x 8 1/2, hardboard. \$6.00

531—RAILWAYS OF AUSTRALIA, Singleton & Burke. Changes in Aussie RRs from steam to diesel. 176 illus., 3-color foldout map, 8 1/2 x 9, 160 pgs., cloth bound. \$5.00



534—ROGERS LOCOMOTIVE WORKS CAT. A LOG reproduction including history, origin and growth of company from 1831 to 1886. Limited edition of 1250 copies. 200 pgs., 8 x 11, brown cloth. \$10.00



520—20TH CENTURY, Lucius Beebe. Since 1902 the 20th Century has been one of the world's great trains. Beebe has chronicled this luxury train at its beginnings with a mass of detail in text, pictures, clippings, and paintings. Gives the feel of real railroading at the height of the era of opulence. 180 pgs., 8 1/2 x 11, hardboard. \$5.95

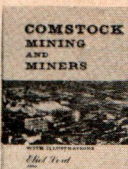
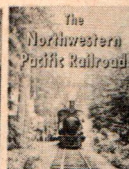
518—RIO GRANDE, Beebe & Clegg. The Mainline to the Rockies. The splendor of the Rockies combined with the tale of the Rio Grande. 380 pgs., over 540 illus., 4-color reproduction maps, drawings. Cloth binding. \$10.00



164—KANSAS WEST, Anderson. The Kansas Pacific and the D&RG. Scholarly work with 90 illus., 2 Kuhler paintings, 264 pgs., 6x9 hard bound. \$6.95

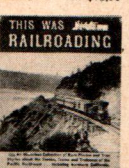
423—THIS WAS RAILROADING, by George B. Abbill. You'll thumb through this fascinating volume many times to study the more than 350 rare old photos before you'll even start on the text. Hard to say which are more intriguing: the old locomotives or the breath-taking scenes of bygone railroading. Plenty of trestles, wrecks, equipment and ROW scenes. This book is pure railroading with all of the cinders and soot. A must. 8 1/2 x 11, 192 pages. \$3.95

741—LOCO ENGINEERS ALBUM, Abbill. 514—THE TRAINS WE RODE, Beebe & Clegg. 4770 pgs., 801 illustrations, 8 1/2 x 11 cloth. \$15.00



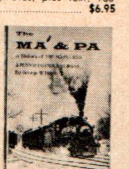
740—RAILROADS OF THE BLACK HILLS, Fielder. 200 photos of the South Dakota railroads. Includes 18 pages of Jackson photos. Letterpress printed on coated stock. 8 1/2 x 11, hardboard. \$12.50

173—NORTHWESTERN PACIFIC, Lindt & Dunscomb. Story of the NWP, wholly owned subsidiary of the SP. Loaded with ferry boats, nostalgia, smoke, creaking coaches. 272 pgs., 400 illus., 8 1/2 x 11, hardboard. \$12.50



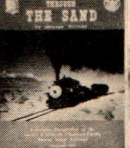
155—ARTICULATED LOCOS OF THE WESTERN PACIFIC, Noble. Unforgettable action and still photos of the WP's giant steamers. Rosters of all WP steam power. 24 pgs., 21 illus., 8 1/2 x 11, paper. \$1.50

847—REDWOODS, IRON HORSES & THE PACIFIC, Crump. Story of the California Western and its Stunk rail cars. 150 illustrations, maps, drawings, photos, plus text. 160 pgs., hardboard. \$6.95



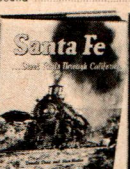
522—VIRGINIA & TRUCKEE, Beebe & Clegg. Fifth edition. A story of Virginia City and Comstock Times. Soft cover, 68 pgs., 6x9. \$1.00

523—THE MA & PA, George Hilton. History of the Maryland & Pennsylvania from its start. Profusely illustrated. 183 pgs., 6x9, hard cover. \$5.00



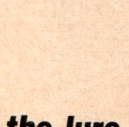
848—SLIM RAILS THROUGH THE SAND, Turner. 80 years of Carson & Colorado a SP narrow gauge. Many rare plans. 112 pgs., 8 1/2 x 11, hard board. \$4.95

532—THE RUTLAND ROAD, Shaughnessy. Jim Shaughnessy has come up with a superb volume on Vermont's big little railroad. Over 370 pages pack in 425 photos, 16 maps, timetables, charts, plus readable text. 9 x 11, hard board. \$10.00



163—SANTA FE, Duke & Kistler. Over 300 illus., maps, paintings, photos and text of a great carrier. A must for all Santa Fe buffs. 164 pgs., 8 1/2 x 11, Hard bound. \$10.00

822—STEAM LOCOS OF THE BURLINGTON ROUTE, Corbin & Clegg. A labor of love on one of our great railroads. Loaded with data and photos. 9 x 11 1/2, 302 pgs., coated stock. \$15.00



172—PACIFIC COAST SHAY, Dan Ranger. From the beginning to the Shay to development of famed Pacific Coast type. Many illus. 8 1/2 x 11, 112 pgs., hardb. \$7.95

517—MIXED TRAIN DAILY, Lucius Beebe. Greatest book on mixed trains and short lines ever written. Full of photos and sparkling text. 370 pgs., 8 x 11. \$9.50

509—COMSTOCK MINING AND MINERS, by Eliot Lord. A reproduction of the famous 1883 edition with addition of 117 illustrations. An on-the-spot account of bonanza days in Virginia City, Nevada. Not a railroad book but essential to all railfans interested in Western Lore. 578 pages. \$8.50

511—PONY EXPRESS—THE GREAT GAMBLE, by Roy Bloss. Before the railroad came the Pony Express. Of special interest to philatelists, historians, and railfans and transportation enthusiasts. 200 pages text, 40 pages illustrations. 6x9. \$4.50

176—RAILS TO THE RISING SUN, Small. About smoky little trains in Japan. 8 1/2 x 11. \$7.95

733—REDWOOD CLASSIC, by Ralph Andrews. 100 years of California logging, railroads, San Francisco, and men. Rare logging railroad scenes. \$10.00

812 — WEEKS HISTORY Y OF THE TWO FOOTER, Thurlow. History and pix of the Wiscasset, Waterville & Farmington, and Kennebec Central. 5 1/2 x 8 1/2, paperback. \$1.75

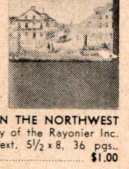
813—WW&F TWO FOOTER, HAIL & FARE, Thurlow. More Wiscasset, Waterville & Farmington history and pix. 8 1/2 x 5 1/2, paperback. \$1.95

814—OVER THE RAILS BY STEAM, Thurlow. A railroad scrapbook of Maine narrow gauge lines. 104p., 5 1/2 x 8 1/2, paperback. \$1.95

806 — POCKET ENCYCLOPEDIA BRITISH STEAM LOCOS, Nock. 192 British steam locos in color. 192p., 5x7 hardb. \$2.90

807—NORTH EASTERN ATLANTICS, Hoole. Comprehensive coverage of British 4-4-2 types on the NE. 6x9, 64p., paperback. \$2.75

528—COVERED BRIDGES OF THE WEST. 201 choice photos, covering Oregon, Calif., Wash. 150 pgs., 8 1/2 x 11, hard cover. \$5.95



851—RAILROADING IN THE NORTHWEST PINES, Gutohrein. Story of the Rayonier Inc. railroad. photos and text. 5 1/2 x 8, 36 pgs., paper. \$1.00

852—PENNSYLVANIA RR. THE EARLY DAYS, Brooks. Small volume on the Penn's beginnings. Many early dwgs. 5 1/2 x 8, 52 pgs., paper. \$1.25

808—GONE WITH REGRET, Behrend. Recollections of Great Western Ry. 1922-1947. British. A delight. 6x9, 190p., hardb. \$3.90

809—CASTLES & KINGS. Pictorial survey of Great Western steam locos. Many great action photos. British. 7 1/2 x 10, 76p., hardboard. \$5.40

811 — COLORADO'S MOUNTAIN RAILROADS Vol. 2. The D&RGW, RGW, RGS. 208 photos, 208 pages, 6x9 paperback. \$5.95

658—C&O POWER, Stauffer. 352 p., over 700 photos, text, on steam and diesel power 1900-1965. 8 1/2 x 11 hardb. \$15.00

815—PICTORIAL HISTORY C&NW, Knudsen. Over 300 rare pix of steampower on the C&NW, 1848-1956. Maps, diagrams. 208 p., 8 1/2 x 11 hardb. \$10.00

858—DINNER IN THE DINER, Hollister. Great railroad recipes. Let the wife feed the Friday night gang the right way. Superb rare recipes to delight the gourmet. 8 1/2 x 11 hardb. \$5.95

827—COLORADO MOUNTAIN RAILROAD, VOL. 1. Covers 37 roads from Argentine Central thru DNW&P. 110 pgs., 130 pix, etc. 6x9, paper. \$3.00

737—LOGGING RAILROADS OF THE WEST, Adams. Remarkable assemblage of logging road photos, text, along with a complete list of western logging rrs. \$12.50

175—THE GENERAL Pittenger. Reproduction of the original account of 1862. 416 p., 6x9. \$6.95

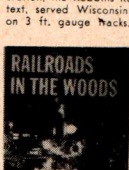
834—BUFFALO, LOCKPORT & ROCHESTER RT., Gordon. 8 1/2 x 11, 84 pgs., 100 pix, maps. etc. Paper-covered volume on picturesque route of Rochester 54 miles to Lockport. \$2.50

751—LOCOS OF THE PENNSYLVANIA RR, Warner. Largely reprinted material from rare old issues of the Baldwin Loco Works magazine. Covers up thru mid-1920 period. 80 pgs., 8 1/2 x 11, paper. \$3.00



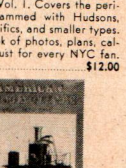
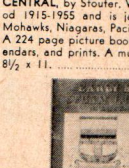
504—MANSIONS ON RAILS, by Lucius Beebe. The story of private railroad cars and the moguls who rode them amid plush Victorian appointments. 380 pages; 350 rare pictures, 6 in full color. \$10.00

823—THUNDER LAKE NARROW GAUGE, by Huston. Wisconsin's last narrow gauge operation, the Robbins Railroad, in pictures and text, served Wisconsin from 1893 thru 1941 on 3 ft. gauge tracks. 6 1/4 x 9 1/4, 145 pgs. \$7.50

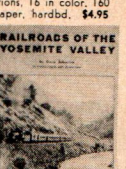


516—RAILROADS IN THE WOODS, by Labbe and Goe. 269 pgs. and 440 illustrations depict the thrilling story of logging railroads. 8 1/2 x 11 1/4, loaded with Shays, Heislars, equipment. Best logging book yet. \$10.00

651—STEAM POWER OF THE NEW YORK CENTRAL, by Stauffer. Vol. 1. Covers the period 1915-1955 and is jammed with Hudsons, Mohawks, Niagaras, Pacifics, and smaller types. A 224 page picture book of photos, plans, calendars, and prints. A must for every NYC fan. 8 1/2 x 11. \$12.00



424—EARLY AMERICAN STEAM LOCOMOTIVES, Read Kiner. Steam power from 1830 to 1900. 96 illustrations, 16 in color. 160 pgs., 11 x 8 1/2, coated paper, hardb. \$4.95



171—RAILROAD AVENUE, Freeman Hubbard. Varied collection of great railroad tales and legends. illus., 6x9, hardboard. New edition. \$5.95

846—RAILROAD OF YOSEMITE VALLEY, Johnston. Covers Yosemite Valley RR, Yosemite Lumber Co., Yosemite Sugar Pine Lumber Co., and Yosemite Portland Cement Corp. 400 illus., 208 pgs., hardboard. \$12.50



526—OVERLAND LIMITED, Beebe. Let his critics scoff; this is Beebe at his Victorian pomp best, covering one of America's great trains, as only a gourmet and artist can. Plenty of vintage equipment photos.

503—THE MAINE TWO FOOTERS, by Linwood Moody. First complete coverage of all the New England 2-footers: Wiscasset, Waterville & Farmington; Monson; Edenville; Kennebec Central; Billerica & Bedford; Bridgeton & Saco River; Bridgeton & Harrison; Sandy River & Rangeley system; Wiscasset & Quebec; and others. 6x9, 328 pages, almost 200 illustrations, 60,000 word text, maps. \$6.00

the lure, the fascination of railroading
In these fine books for model rails.

For more advanced reading on specialized model railroad subjects, these books by experts in the field are a must. Start adding to your own railroad library today.

Two movie posters are shown side-by-side. The left poster is for 'A Shot of Whisky' and features a close-up of a man's face in profile, looking down, with a bottle of whisky in the foreground. The right poster is for 'A Whopper of a Prince' and features a steam locomotive pulling a train through a landscape, with a large, dark, castle-like structure in the background.

810—BALDWIN LOCO WORKS RECORD
#56. Steam Locomotives of the ATSF, 1896. Paper.

Copyright ©

5 by the Model Craftsman Publishing Corporation

City.....
----- Please add 10c postage

State _____ Zip _____
for all orders under \$2.00 - - - - -

City _____ Please add 10¢ postage

e Zip

Please add 10c postage for all orders under \$2.00



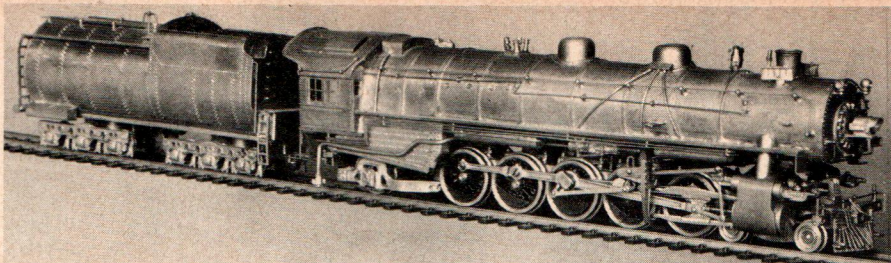
10101 WOODLAND AVENUE
CLEVELAND, OHIO 44104

Available, '67:
U.P. 4-12-2, \$129.50
Same minute detail.

These three cylinder No. 8000 locos were built and delivered by Alco in 1925. They were rebuilt in 1942 to two cylinder engines for service in the Wyoming area and were known as the Overland type. A Deluxe Engine loaded with detail.

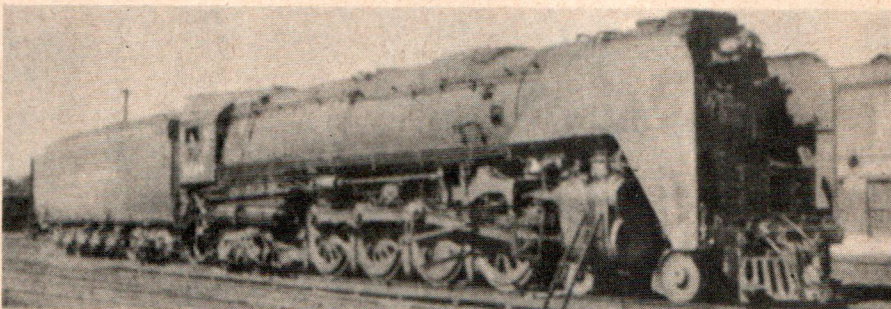
WATCH FOR OTHER NEW HO MODELS COMING

UNION PACIFIC 4-10-2 RTR \$99.50



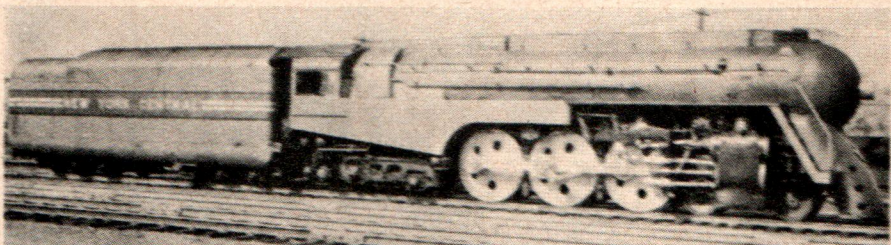
With the mighty Niagara, Steam Engine design on the New York Central reached its culmination. These superb locomotives utilized the best features of their most outstanding predecessors, the Mohawk's eight coupled drivers for high tractive force and the Hudson's four wheel trailing truck, allowing larger firebox area for generating more steam. The 6000's were the optimum of NYC's steam power. Although it was a losing battle, the Niagara matched the diesels at every turn and beat them at some. These models feature all brass construction, fully sprung drivers and tender truck, including a 14 wheel tender. Detail never before available on a Niagara.

N. Y. C. 4-8-4 NIAGARA RTR \$69.50



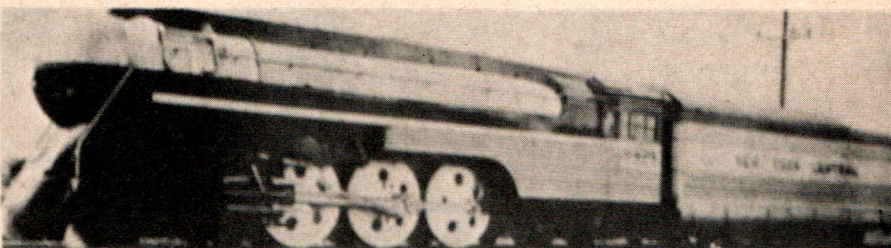
The high mark of NYC's streamlining came in 1938 when designer Dreyfuss streamlined the J-3a Hudson's, incorporating the locomotive into his new design instead of trying to disguise it. The handsome lower running gear was left exposed. These pace setters of style and prestige symbolized the New York Central for the next eight years. 5445-5449 had Box Pox Drivers. 5450-5454 had Scullin Disc Drivers. Available Extra: 14 Wheel PT Centipede Tender\$24.95

20th Century Limited Hudson . RTR \$64.50



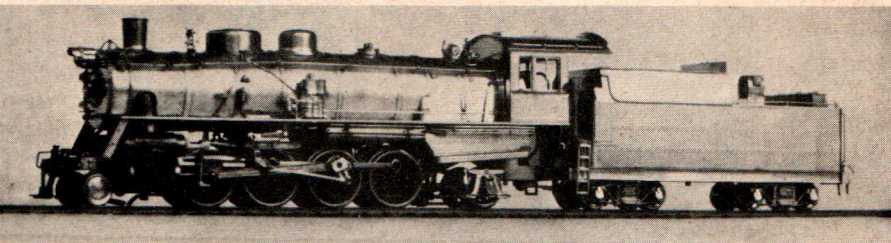
Super Hudson's 5426 and 5429 were streamlined in 1941 to haul the Empire State Express. The style was similar to the type used on Central's "Century," except that the fluting was adapted to conform to the new Budd cars, along with Scullin disc drivers and 12 wheel streamlined tender.

Empire State Express Hudson . RTR \$64.50



Class O-1a. This outstanding locomotive still in use as No. 4960 with switcher pilot, tapered boiler, laird crossheads, reciprocating and revolving parts, switcher tender, tapered sides, high coal boards, lost wax castings and dummy brake shoes. Originally 4940-4999. No. 4942, same class, with straight coal board tender and spoked pilot. Same price.

Burlington Class 0-1A 2-8-2 . . RTR \$59.50



NYC HIOB Mikado 2-8-2	59.50
NYC (B&A) Berkshire 2-8-4.....	64.50
Texas & Pacific 2-10-4.....	69.50
Boston & Maine Berkshire 2-8-4.....	69.50
Norfolk & Western 4-8-0	49.50

HO Forney 2-4-4T	19.95	NYC & HRR 4-4-0	29.95
HO _{n3} Forney 2-4-4-T	19.95	Double Crossover Brass	9.95
HK Porter Mogul 2-6-0	22.50	Double Crossover Nickel Silver.....	11.95
Double Truck Birney Trolley.....	19.95	3-Way Switch Brass	4.95
Single Truck Birney Trolley	12.95	3-Way Switch Nickel Silver.....	6.50

NEW LMB LOCOMOTIVE CATALOG

Beautifully illustrates and describes each locomotive, and our track and bulb accessories. Send Stamped Self Addressed Envelope or 10c address at right.

The Railroad Man's Favorite

See LMB Model Locos at better dealers everywhere. LMB Locos shipped to you prepaid. If your dealer does not have these send your order direct (and send us his name). All LMB Locos Ready to Run.

LMB MODELS

10101 Woodland Ave.
Cleveland, Ohio 44104



Morton's Stone Cutting Plant By E. L. Moore

Morton's stone cutting plant is an action packed structure with its open saw and outdoor siding and crane. Build it from wood sheet and strip.

"THE old plant is showing its age," remarked the manager as he took me through it. For me, that was all to the good. I like old buildings. And the plant did, in fact, look every bit of its forty years, yet good for at least forty more.

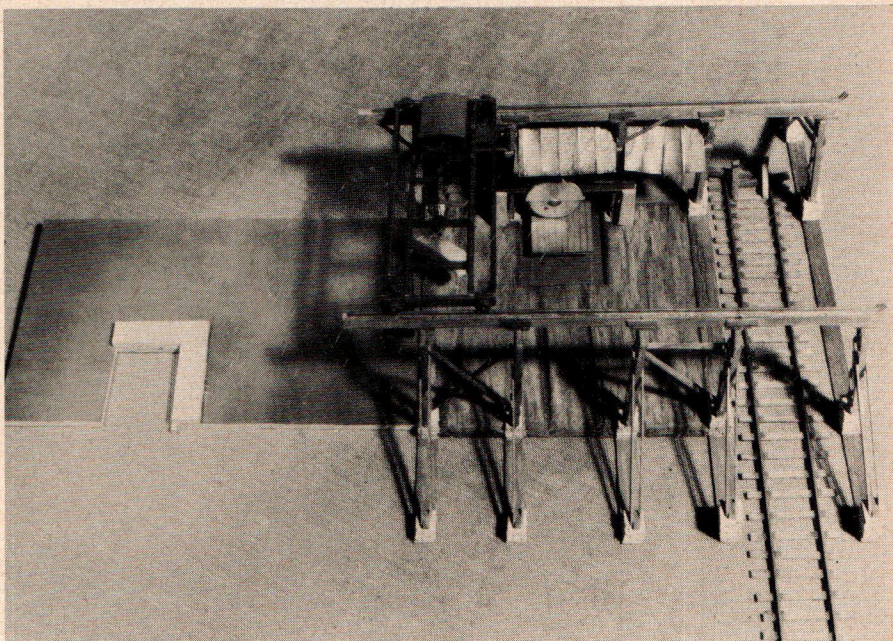
Working stone, I am told, hasn't changed greatly with the passing years. Circular saws slice through great slabs of sandstone and, except for the continuous spray of water fed into the cuts, they might be cutting through wood. And compressed air tools now play a large part in facing building stone. Still and all, the processes are dependent on human skill and this requires workmen with long years of experience, who have a "feeling" for stone; as well as the artistic ability to work the intricate patterns sometimes required.

Huge slabs of sandstone come from quarries by flatcar and are unloaded at the plant by means of an overhead traveling crane. One crane works the

yard and another, on the continuation of the track, does the inside work. The stone in its finished state is then hauled to building sites on flat bed trucks. My plant occupies a space 8"x12", which includes the railroad siding at the yard end.

Although this looks like an impressive list, aside from the first few items it is all small stuff.

The project is going to require, first of all, a base; so check with Figure 1 and the aerial photograph of the plant in its early stages. The plant was



built on sloping terrain and to get around this I've built up the yard area using two thicknesses of the base here. So the first requirement is to cut $77\frac{1}{2}$ ' from a sheet of $\frac{1}{8}$ "x4" balsa. $45\frac{1}{2}$ " of this should be 29' wide, and the remaining 32' will need a 1'x32' strip to be cemented to one side, and another piece 15'x32' to the other. Now an additional 31'x32' piece with a cutout at (B) is cemented on top, with the grain at right angles to the other. Since this raised portion constitutes the earth covered yard I roughed it up somewhat with a brass brush and painted it an earthy color, the rest of the base is a neutral brown. A cutout is made at (A) which will coincide with a door opening and allows trucks to back in for loading. In the prototype this is a shallow pit in the earth floor with a concrete ledge serving as a loading platform.

Turn the base upside down and cut shallow indentations, $\frac{1}{32}$ " deep, by a scale 2 'x $2\frac{1}{2}$ ' to coincide with the spaces (D) along one side, and into which the ends of outriggers (C) are cemented. These are $\frac{1}{32}$ "x $\frac{1}{4}$ " stripwood cut into 2 'x 15 ' pieces. On the outer ends of these will be cemented piers of simulated solid concrete or concrete blocks. In use, these outriggers will be covered with grass or earth or rendered inconspicuous. A similar strip, 56' long, is laid beyond the railroad siding, but this will not be joined until the final moment because of possible damage in handling.

As may be seen in Figure 2 the mas-

onry piers which border the railroad siding are 4' high, while all the others are only 2' high. In theory the yard (2 thicknesses of $\frac{1}{8}$ " balsa) should be 2' high, but is actually only $1\frac{3}{4}$ ', so 6 piers of those marked (D) need only $\frac{1}{32}$ " pieces of stripwood, 2 'x $2\frac{1}{2}$ ' as bases for the trestle supports. I made my masonry piers of $\frac{3}{32}$ " balsa, cut 2 'x $2\frac{1}{2}$ ' and cemented one atop the other and scribed. The piers at (E) match those at (D) in size and height. On the top of the (E) piers cement small blocks 6 "x 9 "x 2 " on their 9" sides—to these the outer ends of braces from the trestle supports will be cemented.

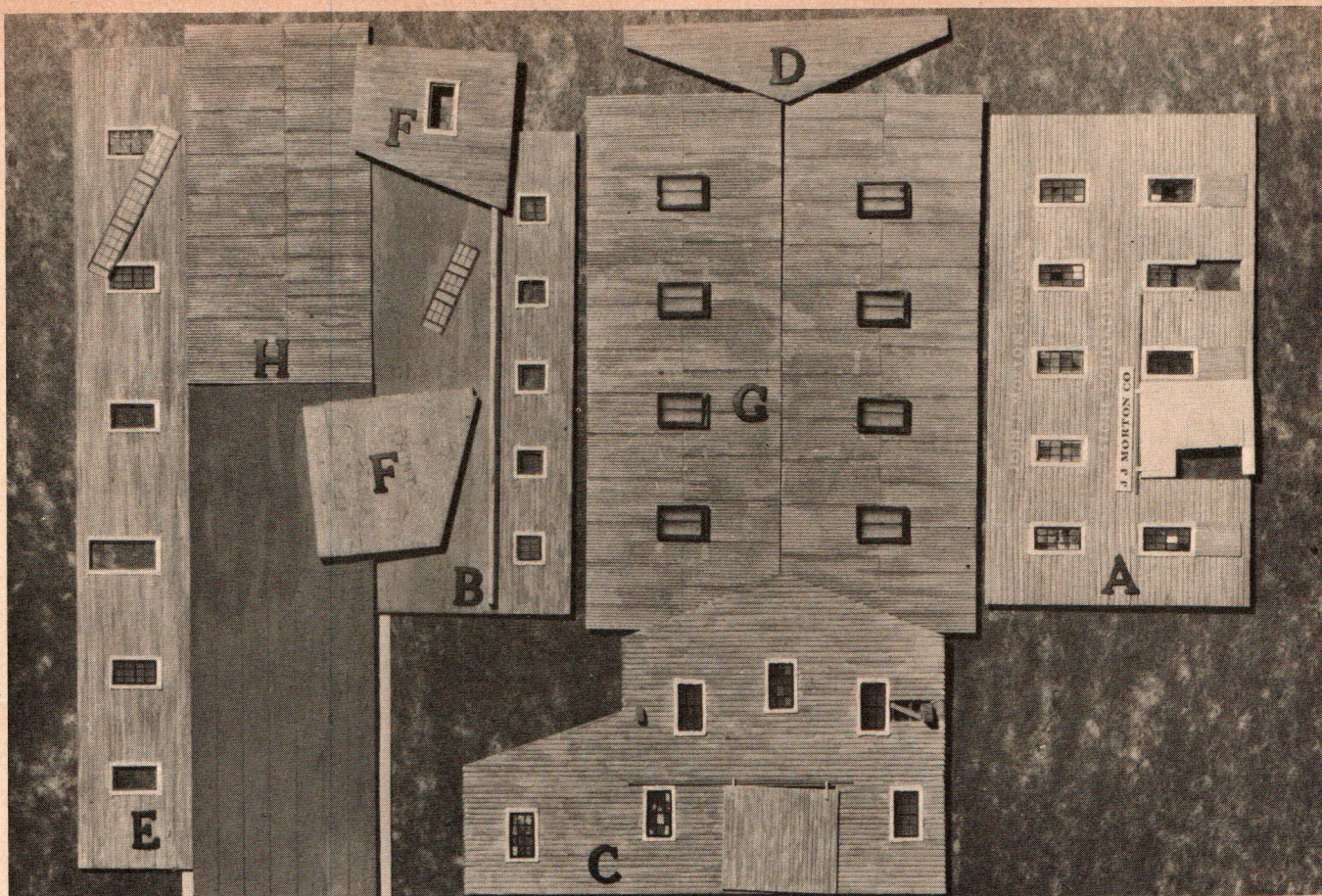
Now to build the supports, which in a manner are similar to trestle bents except that each row of supports carry but a single rail. I built a template on cardboard, using $\frac{1}{16}$ " balsa, leaving a rectangular opening $2\frac{1}{2}$ 'x $14\frac{1}{2}$ ' in which six supports were built. I then shortened it to $12\frac{1}{2}$ ' and built the remaining four. The procedure is to lay a 6 "x 9 "x $2\frac{1}{2}$ ' block at the bottom on its 9" face, and then added the two up-rights, one 6 "x 9 "x $13\frac{1}{2}$ ', the other 9 "x 9 "x $13\frac{1}{2}$ ', and top it off with another 6 "x 9 "x $2\frac{1}{2}$ ' block. There's no set pattern in adding the short braces. When completed, the supports are lined up on the (D) bases or piers, making certain they stand straight, add the 3 "x 9 " long braces which extend to the (E) piers. Cross braces may be added between the supports as in Figure 2. When all are lined up, bring on your top beam which is

12 "x 18 "x 55 ' long, and to which code 70 (or smaller) rail is cemented to one 12" surface with Pliobond. Blocks, 6 "x 12 "x $2\frac{1}{2}$ ' are cemented to the underside of the beam at intervals to coincide with the supports as seen in Figure 2. Care must be taken to keep the rails equidistant at both ends, otherwise your traveling crane may have some difficulty navigating.

The framework of the traveling crane may now be made, the general plan of which may be seen (F) inside Figure 1. While it calls for 4 I-beams, in the absence of these I used 3 "x 12 "s" with 3 "x 6 "s" cemented to tops and bottoms. These, 26' long, are joined at the ends to pieces 3 "x 18 "x 11 ' long. Brace the corners well. Now for the wheels. At least they resemble flanged wheels. I used two paper punches, one making a hole about 15 scale inches in diameter, and the other about 21". I punched out 8 cardboard circles from $\frac{1}{32}$ " material, then cemented them together in pairs, giving me 4 $\frac{1}{16}$ " wheels 15" in diameter. The other punch furnished the flanges from postcard stock, which were cemented to the wheels, then to the carriage ends. Otherwise you'll have to cut the flanges with scissors and the wheels from dowel stock. I painted the carriage frame a dark green, the wheels black and touched the wheel centers with a dot of lighter

BELOW: Aerial view of yard in first stages of construction, with completed yard area. Method of construction applies to all popular scales.





All parts except base are shown laid out in photo above, ready for assembly, lettered for ready identification. Building is not too large for average layout; won't overpower scenery.

color. Better check your track width to see if the carriage frame as I have it will fit—you may have to make a slight alteration in width. Attached to the underside of the carriage frame

is a suspended cage-like affair shown in Figure 3 and which contains the motored power for the crane. It is 3'x5'x5', has a 3'x5' stripwood floor and is otherwise built of 1/32" square stripwood.

My hoist, which travels from one side of the yard to the other across the top of the crane carriage, is more

or less a caricature of the prototype, consisting as it does of a small watch gear, couple of dress snaps, a simulated motor mounted on a 5'x5' base of 1/32" stripwood, which in turn sits atop 1/8" dowel axles with flanged wheels cemented to the ends, and with a curved canopy above to shed the elements.

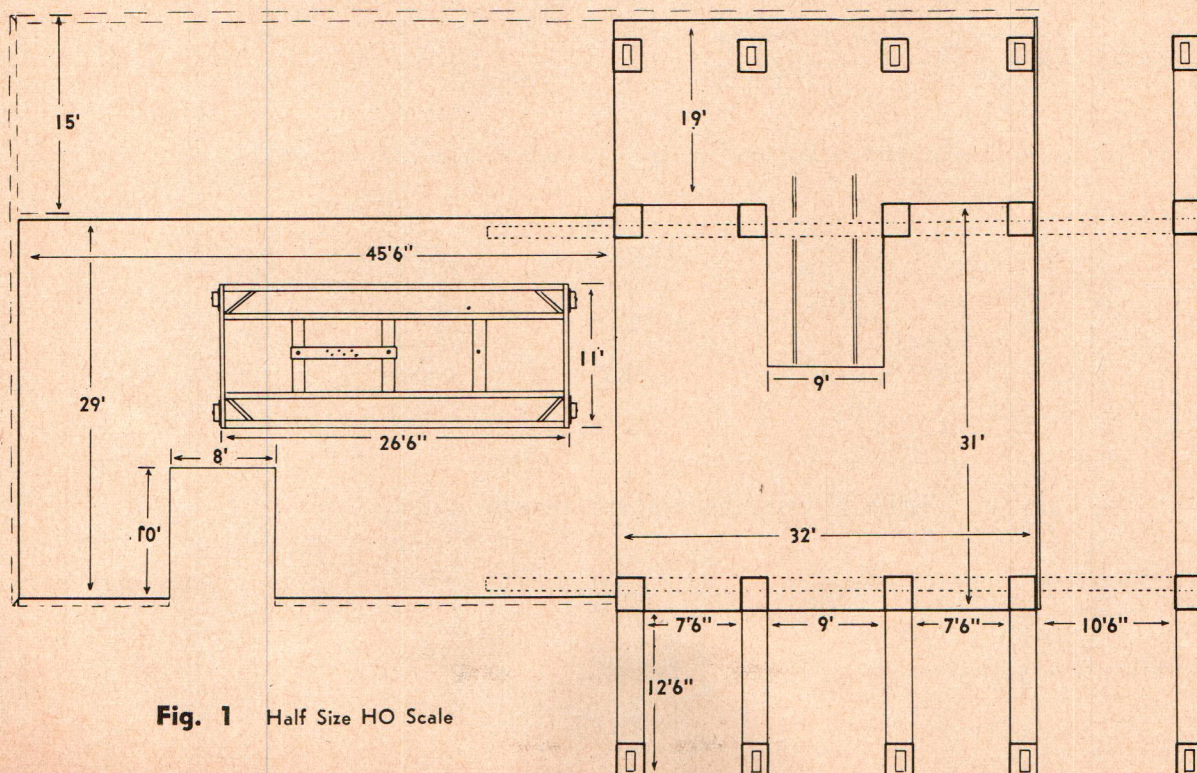
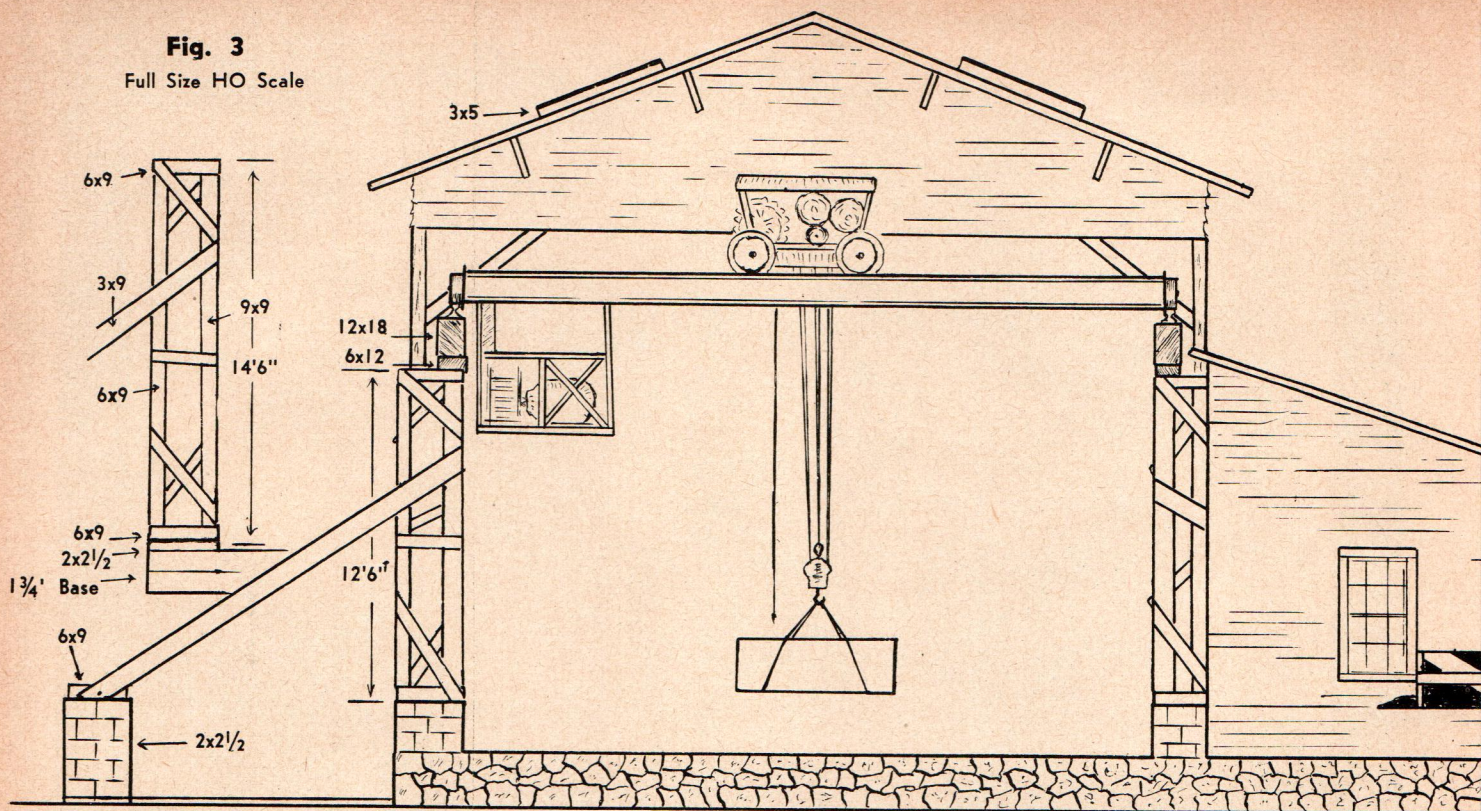


Fig. 1 Half Size HO Scale

Fig. 3

Full Size HO Scale



Required Materials; HO

- | | |
|----------------------------------------------------------------|-----------------------------------------------------------|
| 24" 1/16"x3 1/2" Northeastern clapboard siding (1/16" spacing) | 15" 1/8"x3/16" balsa or stripwood for track beams (12x18) |
| 15" .040x3 1/2" Northeastern corrugated roofing (.040 spacing) | 24" 1/32"x1/8" stripwood (3"x12" HO) |
| 24" 1/8"x4" Sheet balsa for base etc. | 48" 1/32"x3/32" stripwood (3"x9" HO) |
| 7" 1/16"x4" Sheet balsa or sheetwood shed roof | 24" 1/32"x1/16" stripwood (3"x6" HO) |
| 16" 1/32"x1/4" stripwood for outriggers | 24" 1/16"x3/32" stripwood (6"x9" HO) |
| | 24" 3/32"x3/32" stripwood (9"x9" HO) |
| | 15" Code 70 (or smaller) rail 10 sq. inches acetate |



The block, underneath, with its 6 supporting cables, may be seen in Figures 2 and 3. It is a bit of stripwood filed to shape, with an eyebolt at the top and a hook at the bottom. One thread is run through the eyebolt and two through holes in the block. The six thread ends are then passed through drilled holes in a piece of stripwood which is anchored in the crane carriage as may be seen in Figure 1. This was more accessible, although of course in the prototype the block was suspended from the hoist, itself.

(B) in Figure 1 is a cutout simulating a shallow pit with rails. The rails are merely brown paper strips. The carriage in the pit is 7'x8' and stands 18" high on its wheels. Its purpose is to move the large slabs of sandstone into position so that the moving circular saw can make its cuts. The saw is a gear from an alarm clock (could be made from card stock, notched and painted) with the upper portion covered with a guard and a motor mounted above. It travels along an I-beam whose ends rest on 5½' tall stone piers. I was fortunate in making

my first photograph of the saw while it was partially sheltered from the elements by old sheets of corrugated roofing. On a later visit I noticed this had been replaced by a less picturesque but well constructed shelter. My tin coverings were salvaged from an old toothpaste tube. All exposed wood in the yard such as beam, supports and braces was weathered a silvery gray.

This finishes the yard, so now to the other end. Cut from clapboard siding, one piece 24'x46", this being the side shown in Figure 2. What I

Fig. 4

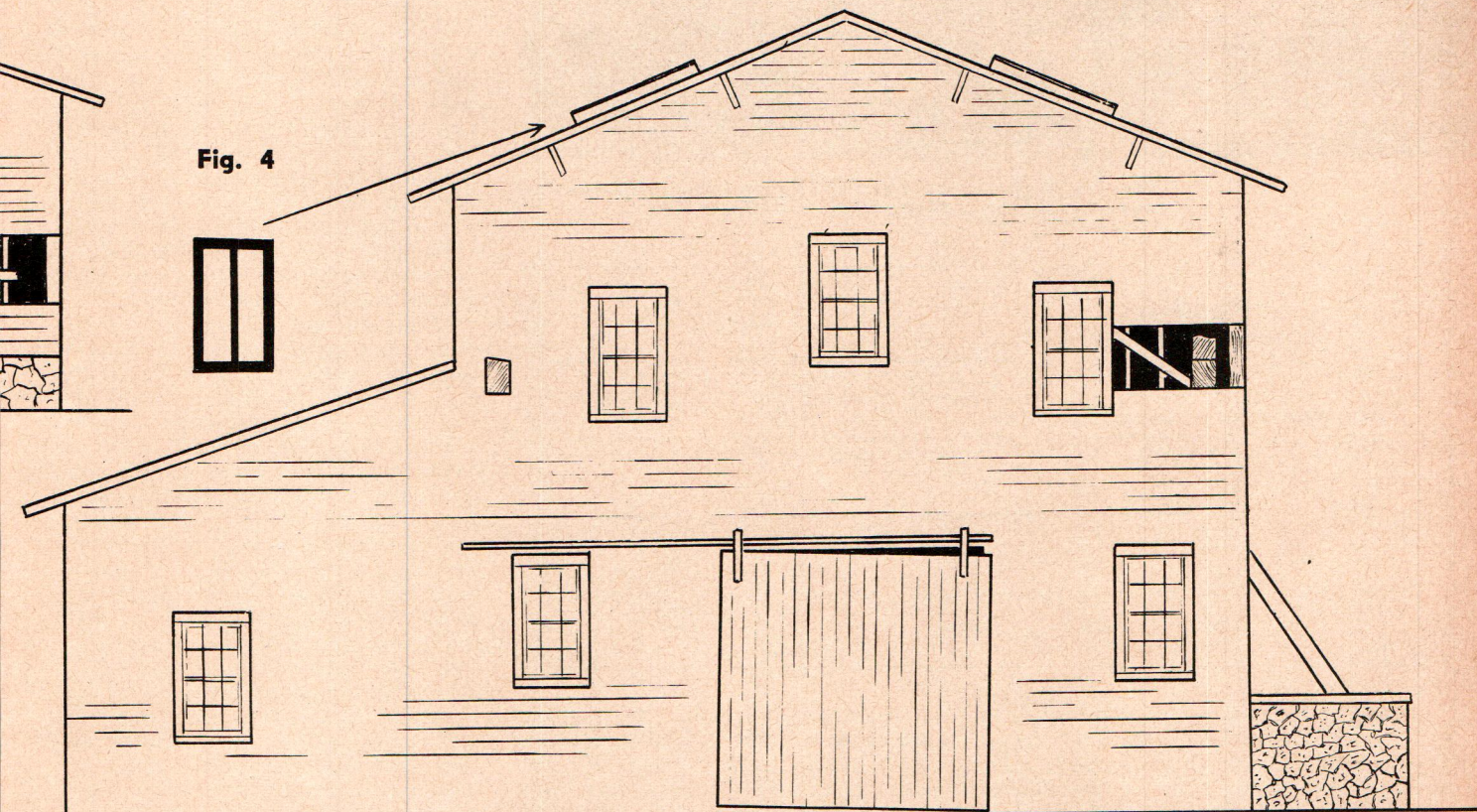
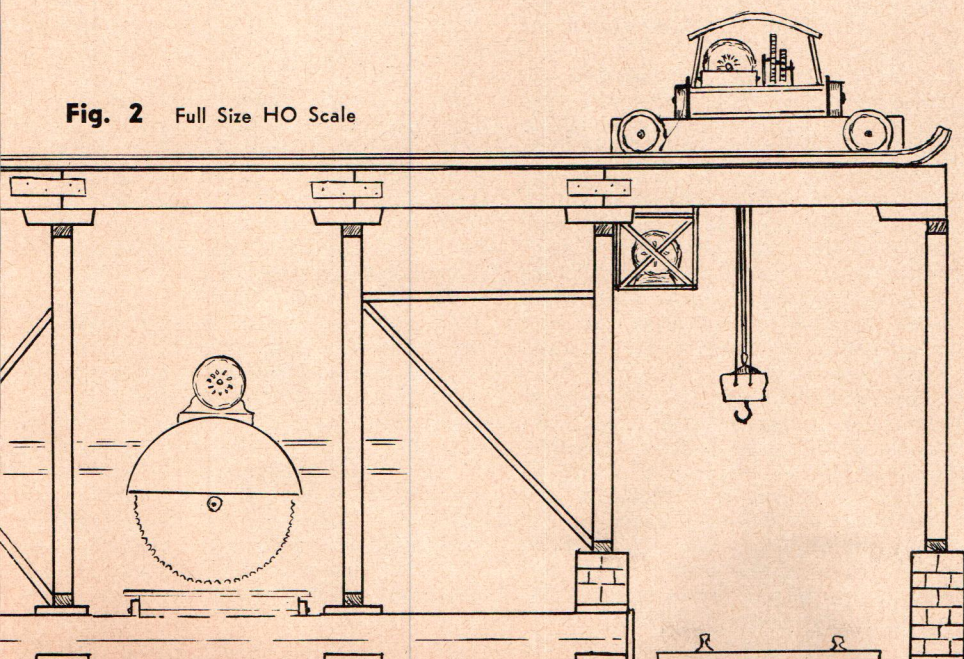
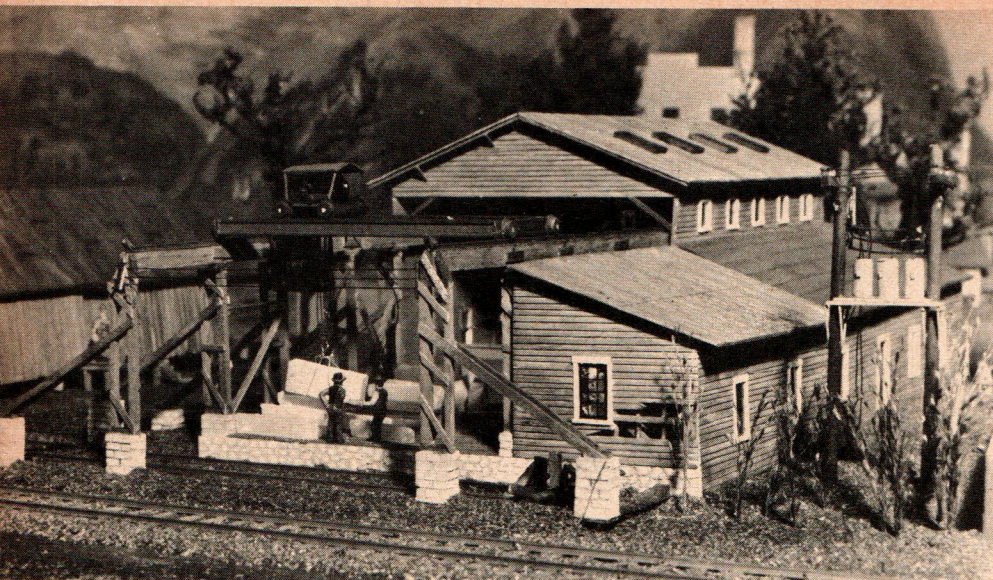


Fig. 2 Full Size HO Scale



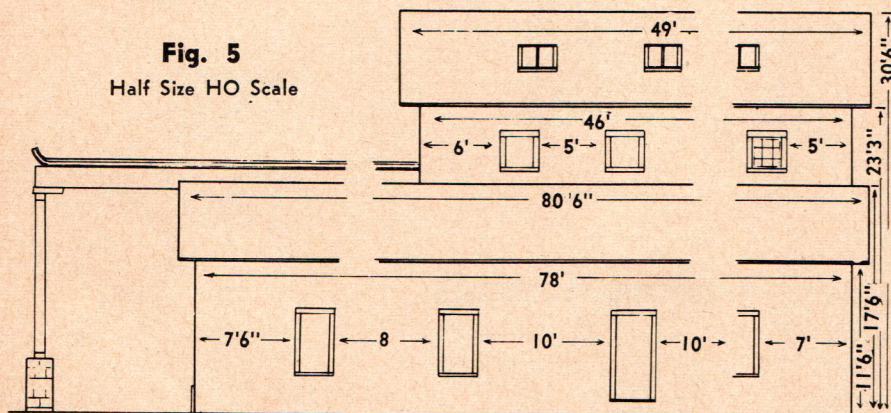
did to Mr. Northeastern's pretty siding would probably cause him to weep. On the back of it I laid out the window and door openings, cut the window openings 3'x5', casing them with white pre-painted 6" square stripwood, except for the bottom sill which took 3"x6" stripwood. Inside this went 3" square stripwood window stops. Bevel the wall end as the building has no corner posts. If you'll observe closely you'll see that I cut my wall 6" too short and therefore had to butt it up against the end wall.

Now to the paint job. While it isn't likely you'll want to follow me through with all the decal work, still here is how I proceeded. The building has a bleached out red paint job, and the dust from stone being worked with compressed air tools is much the same as you'd find around a flour mill. So I first gave the wall a coat of railroad white diluted with 10 parts thinner. When this dried I mixed box-car red 5 parts, caboose red 5 parts, yellow 1 part, and thinner 20 parts,



Rear view of plant from the yard end with all shrubs, grass, and other scenic details in place. Notice small sub-station at right.

Fig. 5
Half Size HO Scale



and applied this to all but the window frames. Then, using Gothic $\frac{1}{8}$ " decals I applied the original company sign. Over this went more of the diluted red, streaking it on until I obtained the desired effect. I added a little extra yellow and streaked this on at random. Later, too, I dusted the wall with pumice stone powder. Over the doorway I put up a fresh sign and made a door of $\frac{1}{32}$ " scribed sheathing, cutting a smaller walk-in door at one side. The little matter of the saw track which juts out below a window to the right of the door, and the display wall at the corner, may well be left until the building is assembled and on location.

Now to the opposite wall (B) in the Kit Photo, and an abbreviated showing of it in Figure 5. Make this $24' \times 45\frac{1}{2}'$ as it will butt up against the end. Make it either from one piece of siding, or, as I did, cement a $7' \times 45\frac{1}{2}'$ strip to a piece of plain $\frac{1}{16}$ " balsa or sheetwood, $17' \times 45\frac{1}{2}'$. The $3' \times 3'$ window openings are spaced just as are the windows in the opposite wall. Attach a $\frac{1}{8}$ " square strip of balsa the length of the wall with the top at 17' to serve as a support for the upper edge of the shed roof.

The end wall, Figure 4, is $45'$ wide,

$12'$ high at shed eaves, $24'$ high at barn eaves, and $30'$ high at peak. Bevel both sides to fit at corners. Window openings are $3' \times 5'$, and a door, $10' \times 10\frac{1}{2}'$ hangs in a closed position so there is no point in cutting an opening other than possibly a little slit at the top. Ends of track beams jut through.

Once the windows are installed the three sides may be assembled. I used frosted acetate, obtainable at office supply stores, for windows and skylights; its matte surface simplifies the inking-in of pane divisions. Windows come in two sizes, 22 of the full size and 5 of the small ones, plus 8 skylights $3' \times 5'$. I sketched the windows in detail with pencil on white card stock, fastened acetate over this and inked them in. They were installed glossy side out.

Before assembling it will help to cement $\frac{1}{8}$ " square balsa strips vertically at the corners. Then assemble, and cut out the other end shown in Figure 3, (D) in Kit Photo. It will help here to cement a piece of $\frac{1}{8}$ " balsa, the same size but only $29'$ wide to the back of the siding before cementing in place. Gives greater cementing and holding surface.

We already have one end of the

shed, so cut the other as in Figure 3, $15'$ at the peak and $10'$ at the eaves. Being a long shed it will also need a center brace the shape of an end. Make this of $\frac{1}{8}$ " balsa, $14\frac{1}{2}'$ wide, $17'$ at peak and $12'$ at the eaves. The shed wall (E) in Kit Photo, is one piece of siding $12' \times 78'$, both ends beveled. Placement of door and windows is not important here. The shed roof is in two parts, one end $17' \times 47'$ is $\frac{1}{16}$ " balsa or sheetwood and is painted a gray and lined to simulate roofing paper. The other end, $17' \times 33\frac{1}{2}'$ is Northeastern corrugated roofing, painted aluminum, then stained a rust color.

The main roof, each side of which is $18' \times 49'$ is also corrugated material and painted like the shed roof. This has to be pieced so I cemented each side to a piece of $\frac{1}{8}$ " balsa $15' \times 44'$, then beveled the top edges to a fit and cemented them in place. The acetate skylights were set on rectangular frames made of $\frac{1}{16}$ " square stripwood, painted black. At the ends of the roof, under the eaves, are short braces of $\frac{1}{32}$ " square stripwood.

A display wall of simulated stone goes at one corner, as seen in Figures 3 and 4. I made this of $\frac{1}{8}$ " balsa, the wall $4'$ high, the ends $6'$ wide and the side $12'$ long, mitering the corners. I gave this several thick coats of cream paint, then made a light pencil sketch of the stone formations on the surface. I followed up with a sharp awl penetrating only into the paint, topping it all with a few pastel touches of water color. A $3"$ coping of simulated stone tops the wall. A $3' \times 4'$ space was ripped out below one window and a concrete pier was set up outside attached to the wall at the base, and on this rests the outer ends of two short I-beams. A trough appears between these and drains off the milky liquid resulting from a circular saw cutting through stone slabs. The braces appearing alongside the building are best left until it is on permanent location. I assure you they are not there to hold up the building, but to brace the track supports.

We are now ready to attach the outermost row of supports and braces to the end of the overhead beam. Add any braces which will assure rigidity. It is also possible to run a brace across at the bottom just beyond the end of the siding and perhaps a slender one fitting between the ties of the siding.

And finally, you'll be needing stone. Of the various items tried: soap, chalk, household wax and art gum, the latter was the most realistic when given an off white coating of railroad color, and it cuts easily with a jeweler's saw. Household wax comes next, but is harder to cut, and unless painted has the look of ice. Both show in one photograph, art gum on the flatcar and the household wax in the background.

If you're thinking of selecting a tombstone, you're in the wrong stone plant. That's a stone of a different color, and another story.

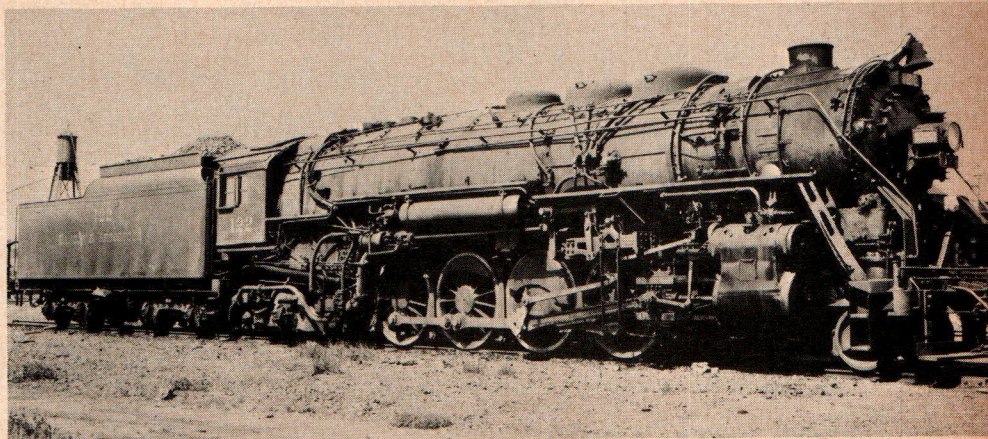


New York, Ontario & Western Class Y-2

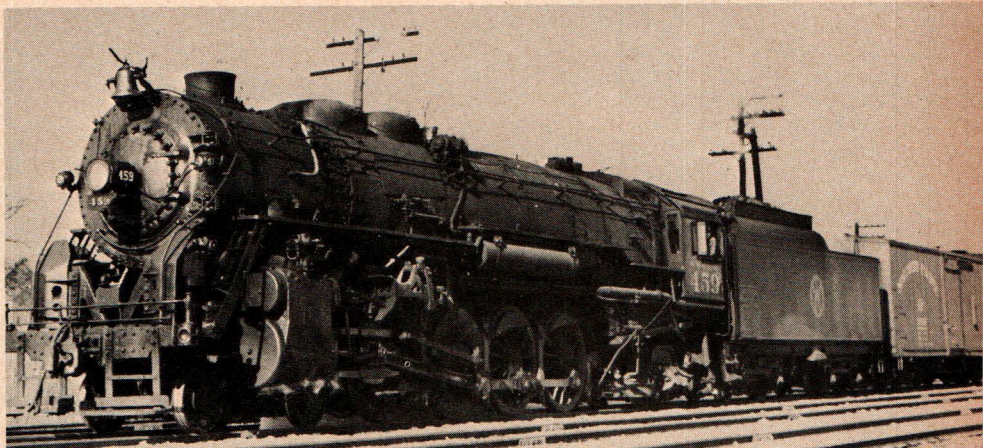
Text and supplementary data from Jack W. Farrell, Jeff Winslow, and Mike Pear-sall.

Alco built 10 husky Mountain types for the New York, Ontario & Western having almost identical specifications as the 100 New York Central L-2C Class Mohawks built simultaneously.

THE most modern and largest New York, Ontario & Western Ry. steam power were these 10 well-proportioned Mountain types which, an offshoot of the much more numerous New York Central Mohawks. The Y-2's and L2-c's, both built by the Schenectady plant of the American Locomotive Company in 1929, were identical in all major respects save for the smaller tender used by the NYO&W. A situation such as this was rather common with railroads in locomotive and car construction orders. It is rather obvious that duplicates of a design already engineered would be less expensive than locomotives of a brand new design with all new

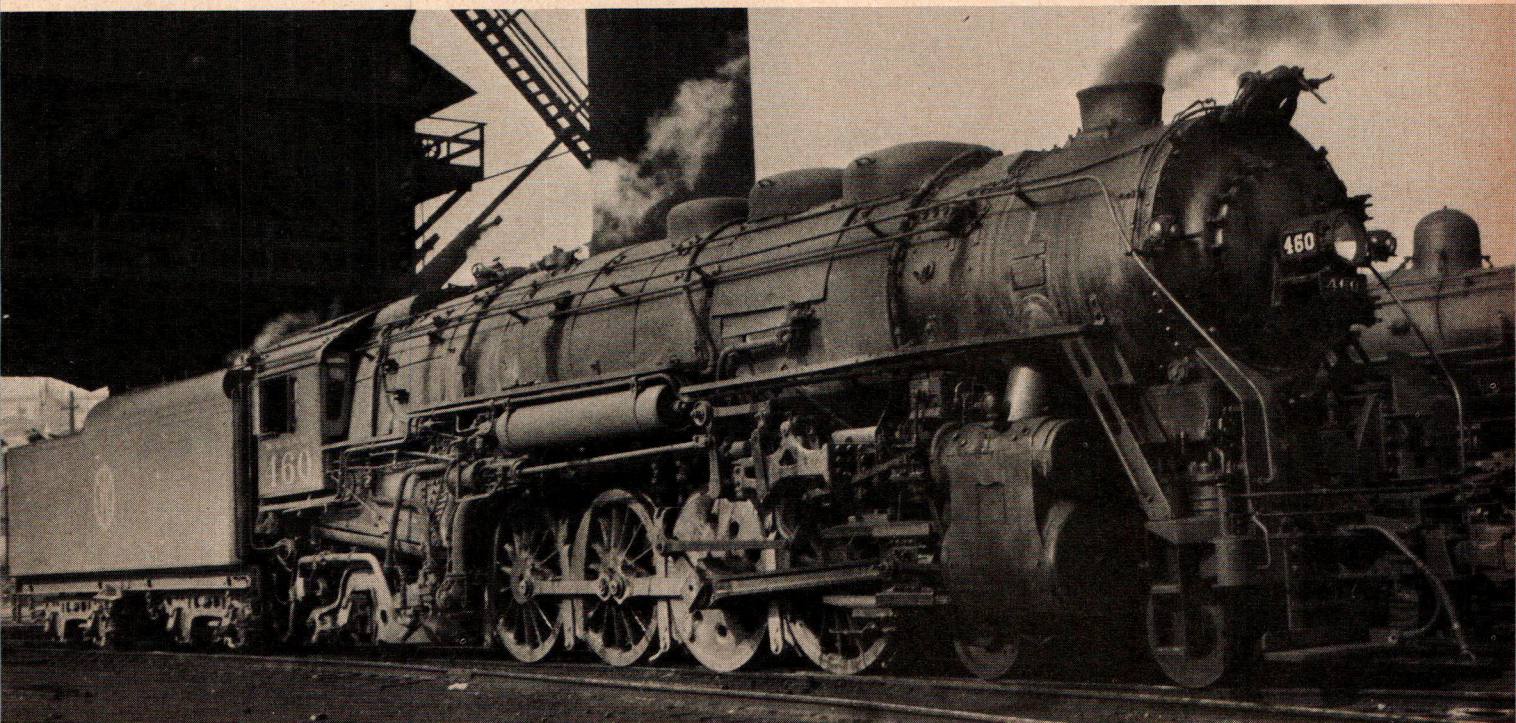


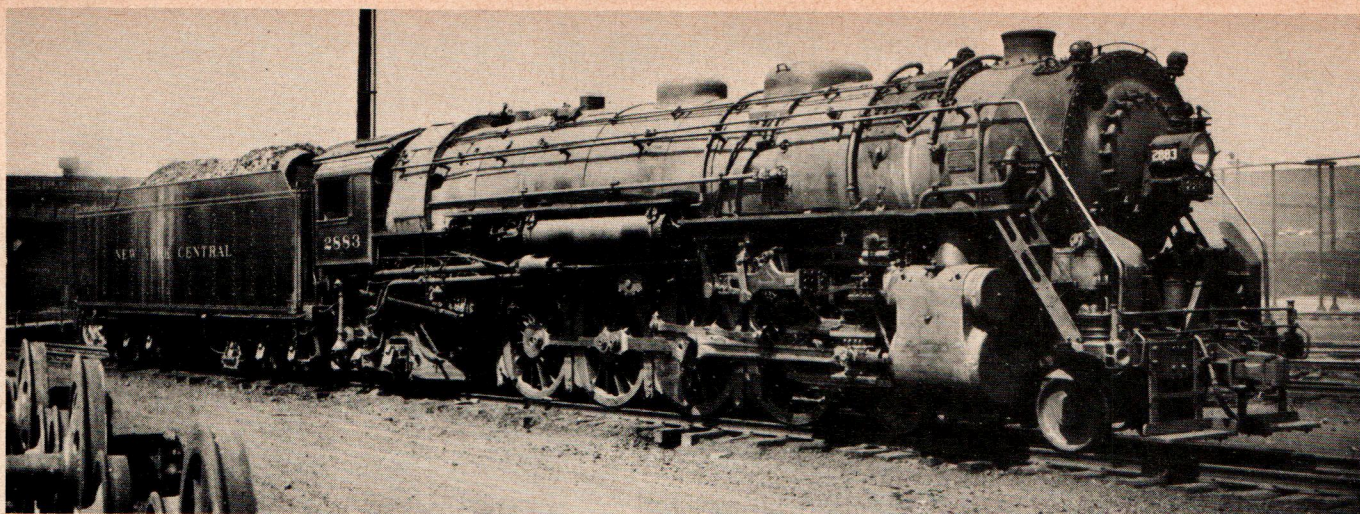
Bangor & Aroostook No. 122, caught by Harold K. Vollrath, at Derby, Maine, in August 1948, former NYO&W 459, shows a newly added BAR illuminated front number board. Coal bunker addition was built by O&W shop forces. BAR took five of the class Y-2s.



Right side view of No. 460 parked under the giant wooden coaling tower at Middletown, N.Y., October 29, 1939. Unusual pilot beam is for snow plow attachment. NYO&W was heavy one time coal hauler.

A cold wintry day in the early 1940's finds 459 whipping AW-2 down the rock ballasted 4-track mainline of the West Shore. Y-2 class was heavier than sleek Y series used in pass. service.





New York Central L-2C No. 2883 basking in the sun at Harmon, N. Y., on a summery day in 1939, reflected a host of minor detail variations from the sister NYO&W Y-2 class. Tender is much larger.

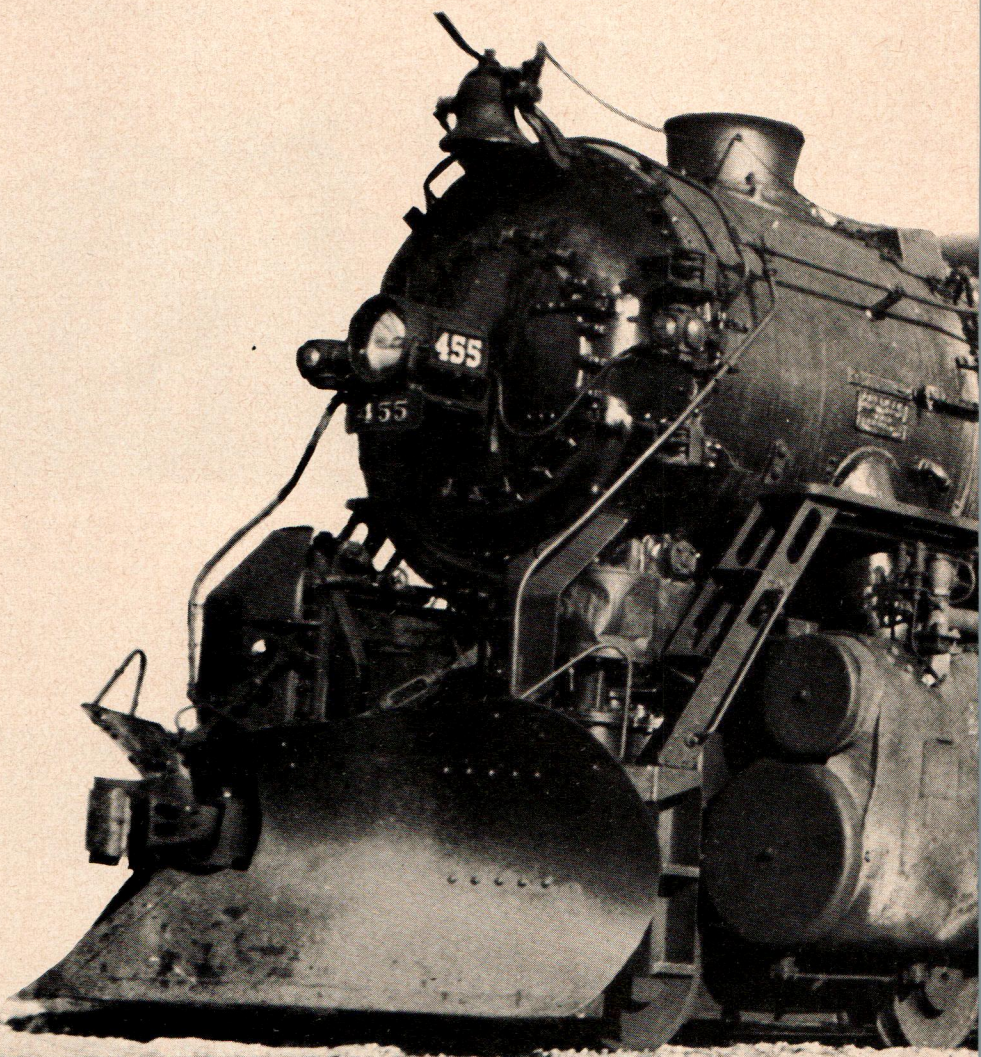
engineering costs. This was especially true of a small order such as the 10 NYO&W engines. By accepting a slightly modified NYC 4-8-2 design already planned, the NYO&W could save most of the design costs.

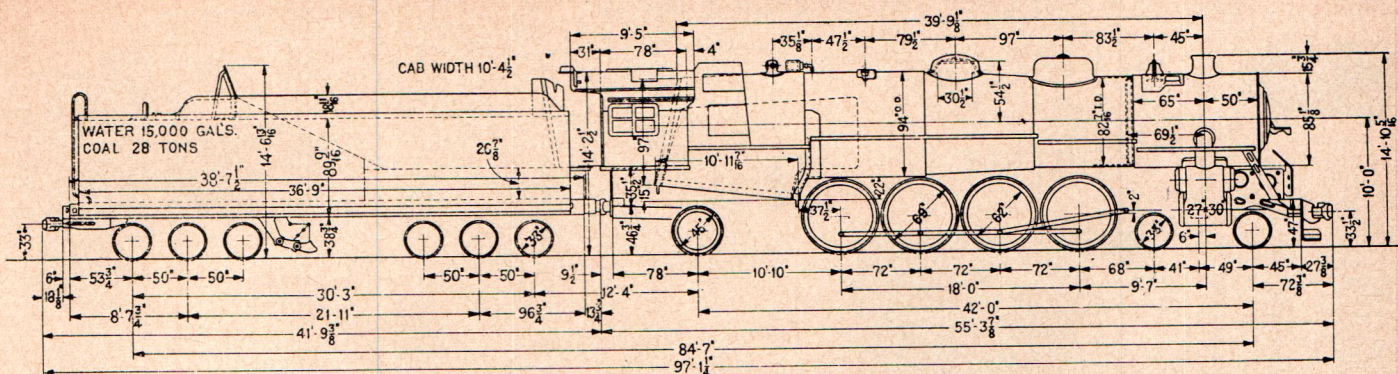
Construction of the 100 NYC L2-c class, 2800 series started in April, 1929 and continued through September. The 10 Y-2's were slipped onto the assembly line in July — if you can conceive of 10 300 ton locomotives being slipped anyplace.

The Kiefer-designed NYC heavy Mountains, longer, heavier and more modern than the USRA heavy design, showed most markedly the influence of the Central's famous Hudsons. The immediate addition of a second sand dome to the Y-2's was essential to a road whose profile contained ups and downs of a nature totally foreign to the original design's "Water Level Route". Kit bashing—prototype style! While the NYO&W engines had Elesco exhaust steam injectors rather than more conventional feedwater heaters as on the NYC L2-c class, they shared such other modern devices as front-end throttles, valve pilot indicators, etc. A few years after delivery, they were further improved through the addition of disc main drivers. Typically O&W is the use of Baker Valve Gear and such touches as the two small steps directly over the front wheels of the pilot truck — essential to authentic modeling, but murder on Snap-Track radius curves!

In common with the earlier Mountains, the Y-2 class were very free-running, a characteristic most beneficial to a road whose schedules called for faster time than speed limits could rationally permit, but whose freights offered impressive on-time performances in days before World War II.

Undoubtedly, these Mountain types were selected on the basis of the outstanding performance of a predecessor group of light 4-8-2's, (Class Y, and Y-1, engines 401-410). These latter, sometimes erroneously termed "light USRA copies", were the last NYO&W "scratch-built" power, designed under the supervision of Superintendent of Motive Power B. P.





Flory at Middletown. Somewhat smaller than the USRA's, they more nearly resembled the Southern's 1914 Ts class and were ideally suited to operating heavy passenger as well as fast freight runs.

In service on the NYO&W, the Y-2's were the road's heaviest and most powerful machines, outperforming some vintage 2-10-2's of 1915. At one time, 2-10-2 no. 355, while fitted with a tender booster, did exert more tractive effort. Ironically, the Y-2's were restricted to "on-line" operation during their first twelve years

because New York Central bridges on the West Shore would not sustain their weight. In later years, however, they were frequent visitors at Weehawken on the symbol freights and occasionally in passenger service.

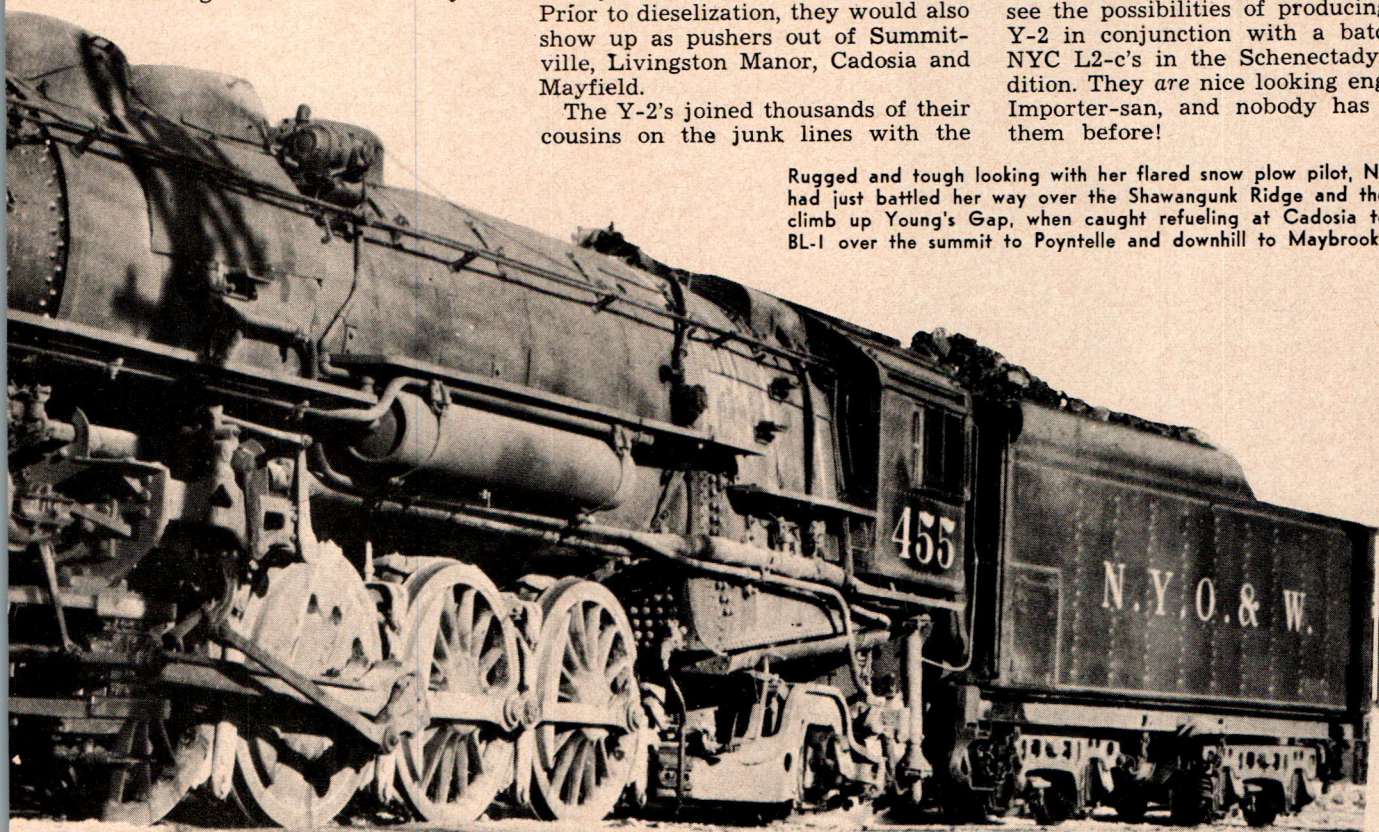
Principal stamping ground for the Y-2 class was the manifest service between Maybrook, New York and various connections near Mayfield Yard, Pennsylvania. Westbound BO-1 and BL-1, eastbound OB-2 and LB-4 linked the New Haven's Poughkeepsie Bridge route with the Lehigh Valley and Lackawanna to the west. Prior to dieselization, they would also show up as pushers out of Summitville, Livingston Manor, Cadosia and Mayfield.

The Y-2's joined thousands of their cousins on the junk lines with the

advent of the diesel, although they did survive well into the diesel age. In 1945, toward the end of World War II, five Y-2's were sold to the Bangor and Aroostook

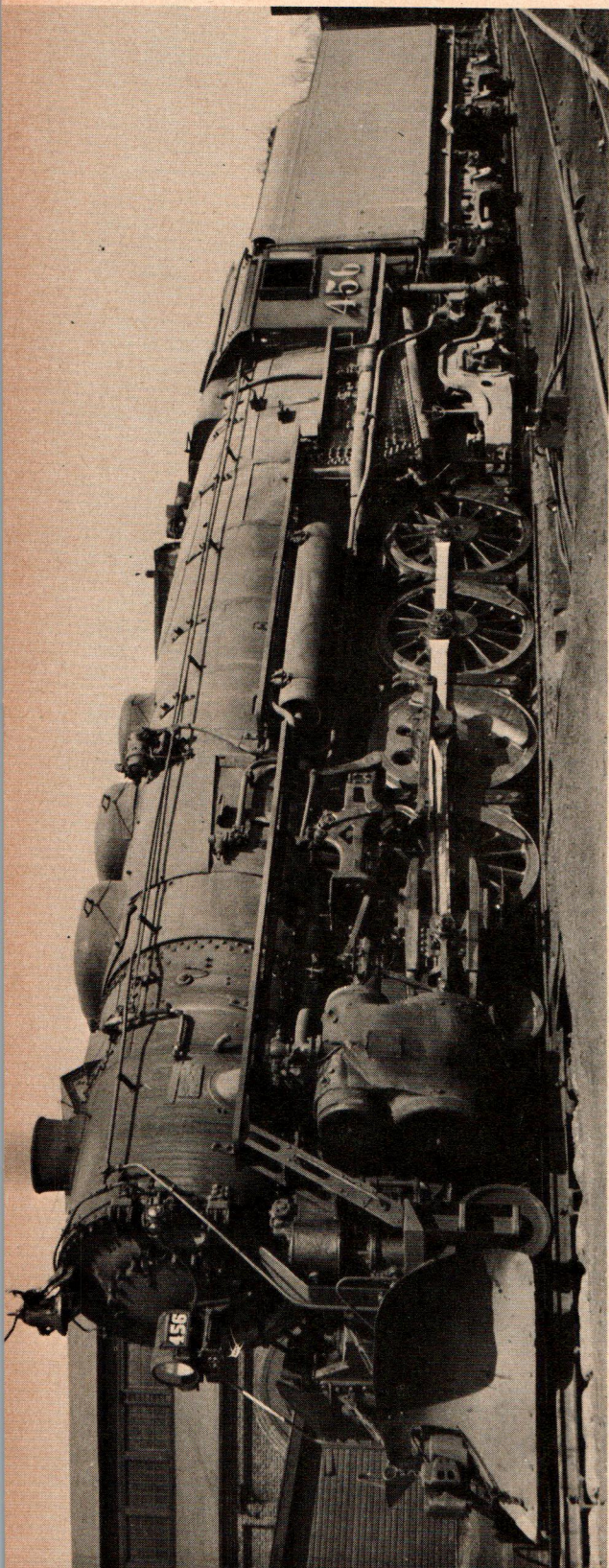
Parts for conversion or reasonably complete components for a scale replica of a Y-2, seem to be scarce. The HO NYC 4-8-2's once offered by Tertshodo, were of a larger class and would not be suitable for conversion. Some elements of the Bowser Mountain have possibilities. There is no "quickie" solution. A last resort is to pray that one of the importers will see the possibilities of producing the Y-2 in conjunction with a batch of NYC L2-c's in the Schenectady tradition. They are nice looking engines, Importer-san, and nobody has done them before!

Rugged and tough looking with her flared snow plow pilot, No. 455 had just battled her way over the Shawangunk Ridge and the long climb up Young's Gap, when caught refueling at Cadosia to take BL-1 over the summit to Poyntelle and downhill to Maybrook Yard.



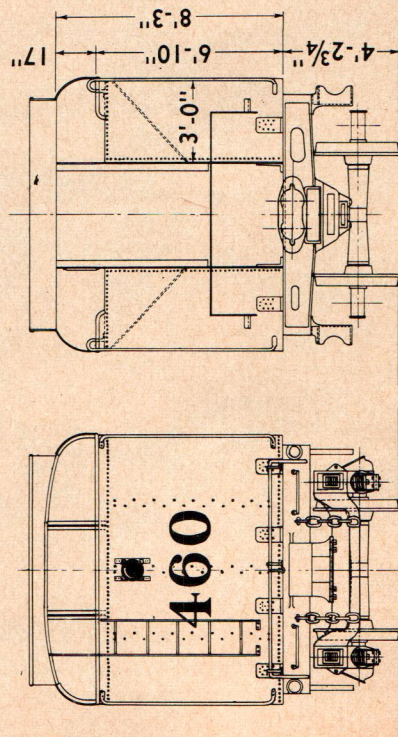
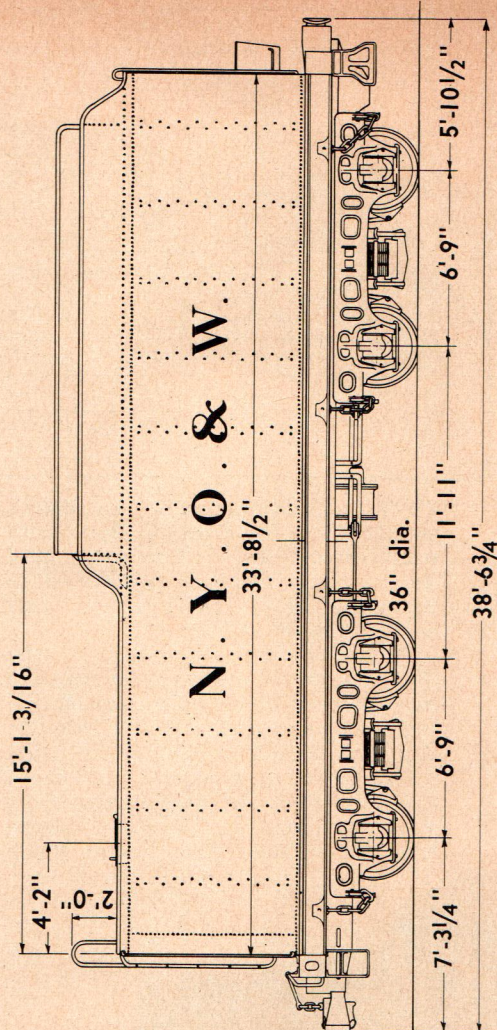
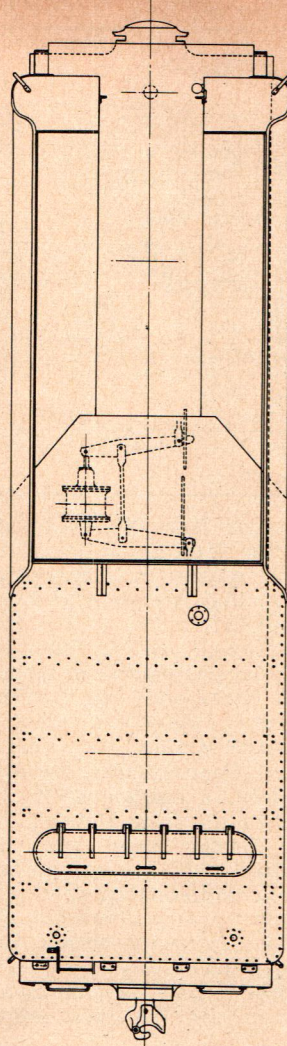


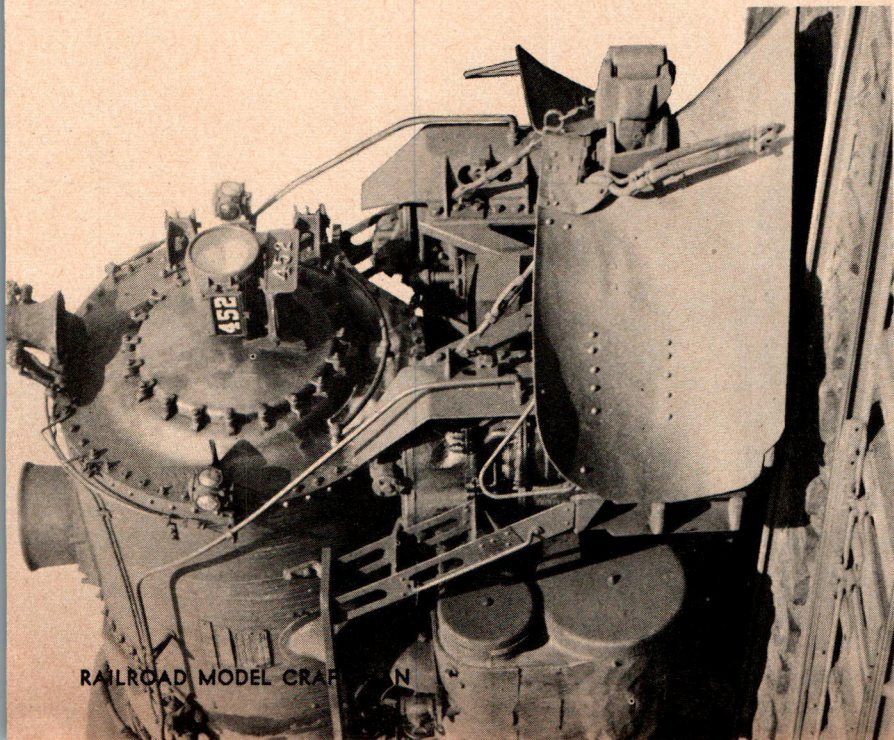
Renumbering of engines sold to Bangor & Aroostook
 NYO&W BAR
 452 120
 454 121
 455 124
 459 122
 460 123



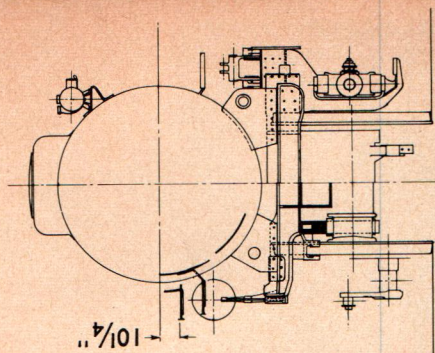
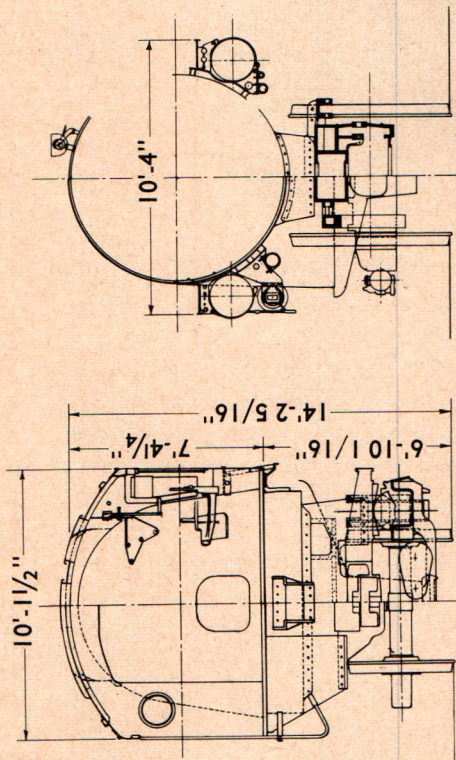
NYO&W No. 456 with snow plow pilot on the ready track at Middletown as snapped by Jack W. Farrell, March 25, 1939, when locos were only ten years old. Notice addition of a disc main driver

drawn for Railroad Model Craftsman by Ray Brown





Closeup view of No. 452 showing plow used on some of the Y-2 class much of the year. O&W power sported several distinctive details.

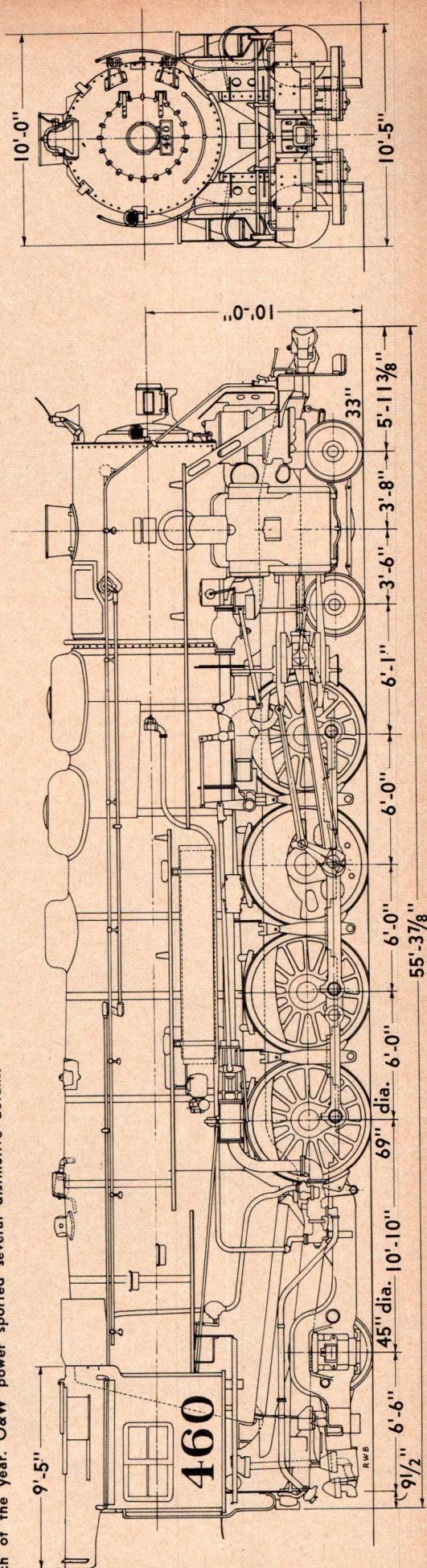


NEW YORK ONTARIO & WESTERN CLASS Y-2 4-8-2: ALCO 1929

Photostats may be made to other scales for your own personal convenience. Railroad Model Craftsman retains all other rights.

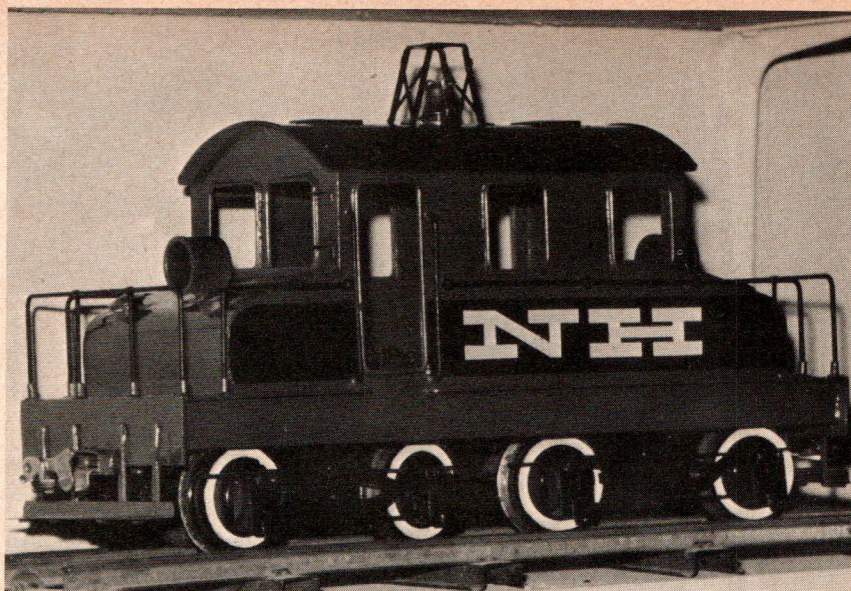
PRINCIPAL SPECIFICATIONS

Class	NYO&W	NYC	Tractive Force	73,020
Series	Y-2	L-2C	w/Booster	365,000
Builder	451-460	2800-2899	Wgt. Engine	675,000
Date Built	Alco-Schen.	Alco-Schen.	& Tender	27" x 30"
Valve Gear	July 1929	Apr.-Sept. 1929	Cylinders	27" x 30"
Boiler Pressure	Baker	Baker	Construction	67986-67995
	225	225	Nos.	



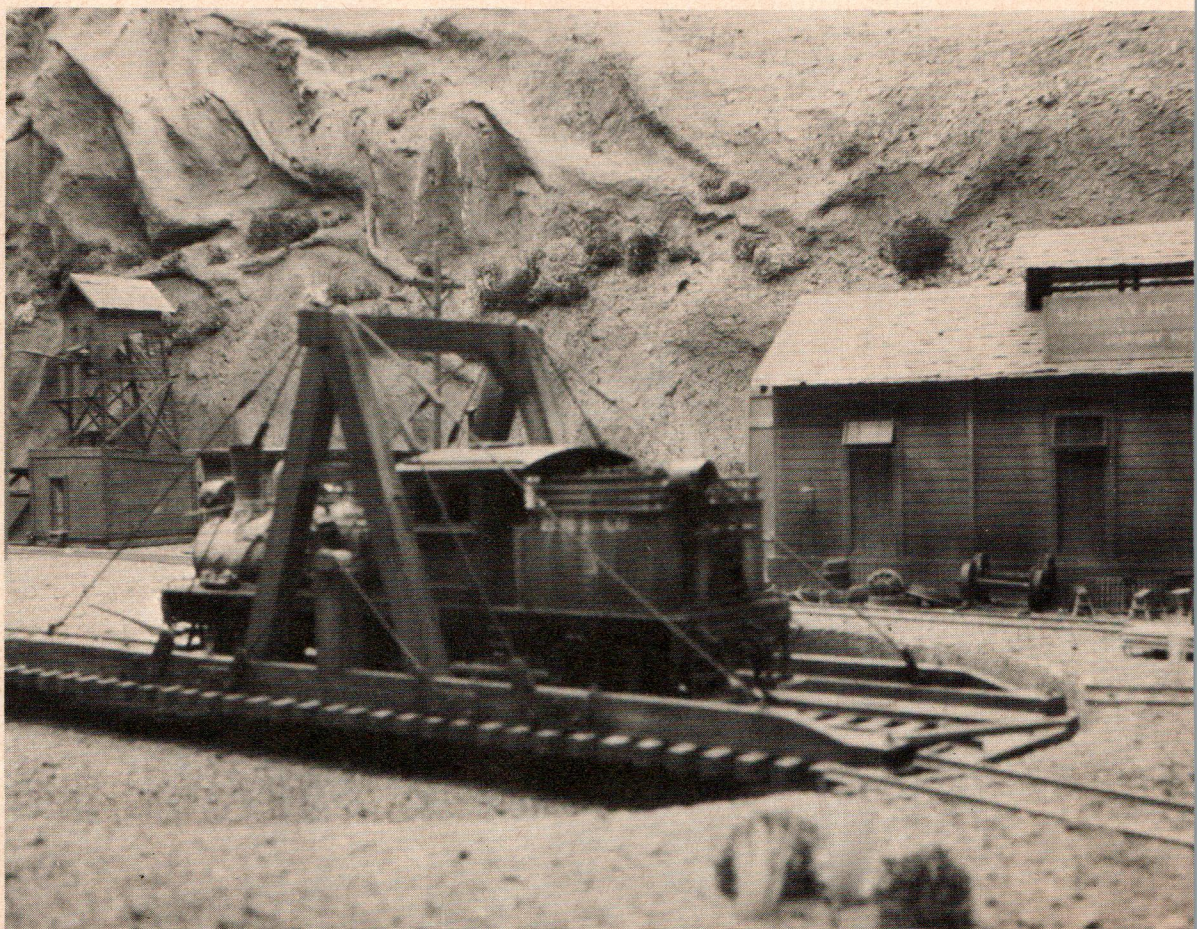
BOOMER TRAIL

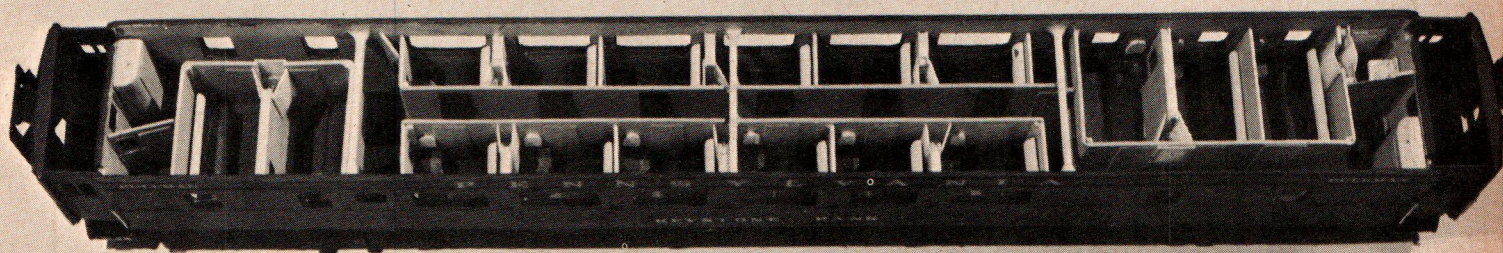
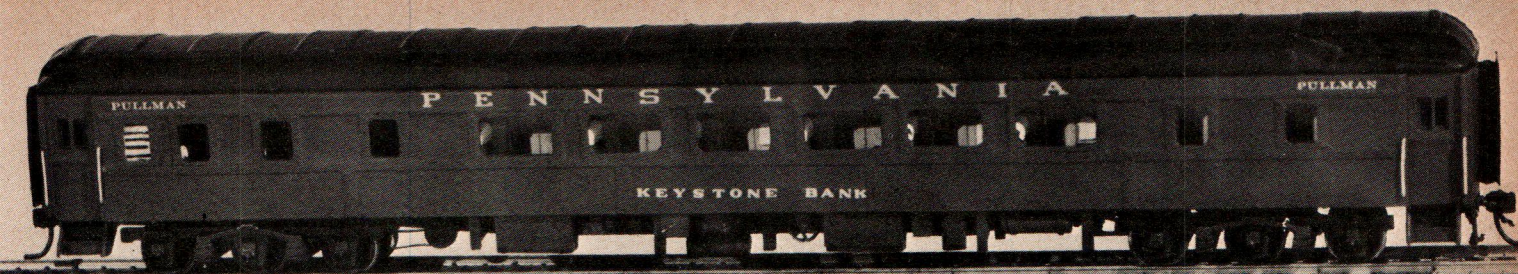
PHOTOS
FROM
READERS



Hoboken Shore Road electric switcher built from June 1958 RMC plans by David O. King, 1458 East 4th St., Brooklyn, N. Y. 11230, to Standard Gauge 7/16" scale. Both trucks are powered, headlights illuminate. Flanges and couplers are Lionel std.

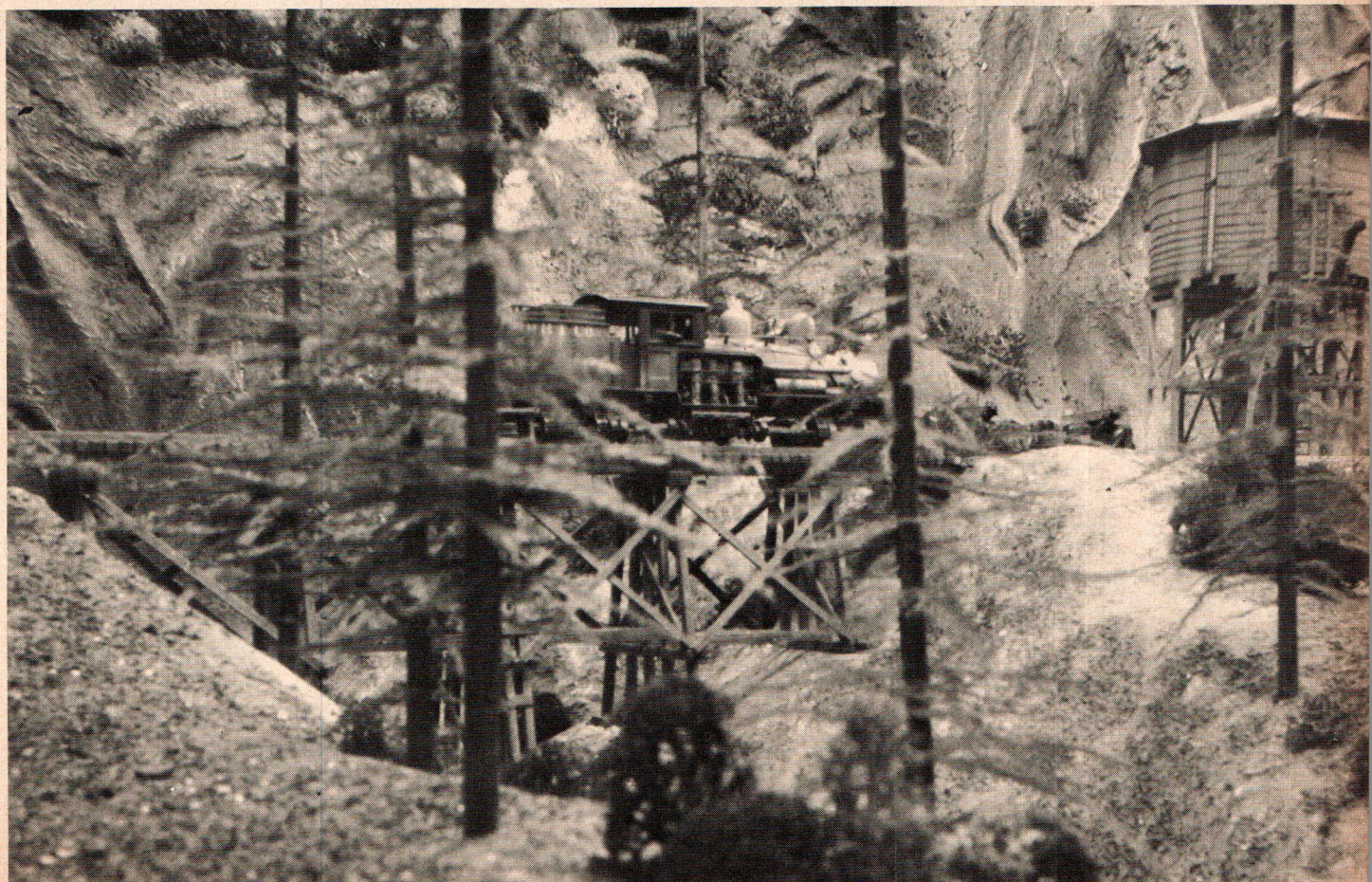
We invite all readers to submit photos of their layouts for publication in the Boomer Trail. Photos must show good modeling and originality. We pay \$5 or more for all non-commercial photos used here. Send photos size 4x5 or larger to the Editor, Railroad Model Craftsman, 6 East Main St., Ramsey, N. J.

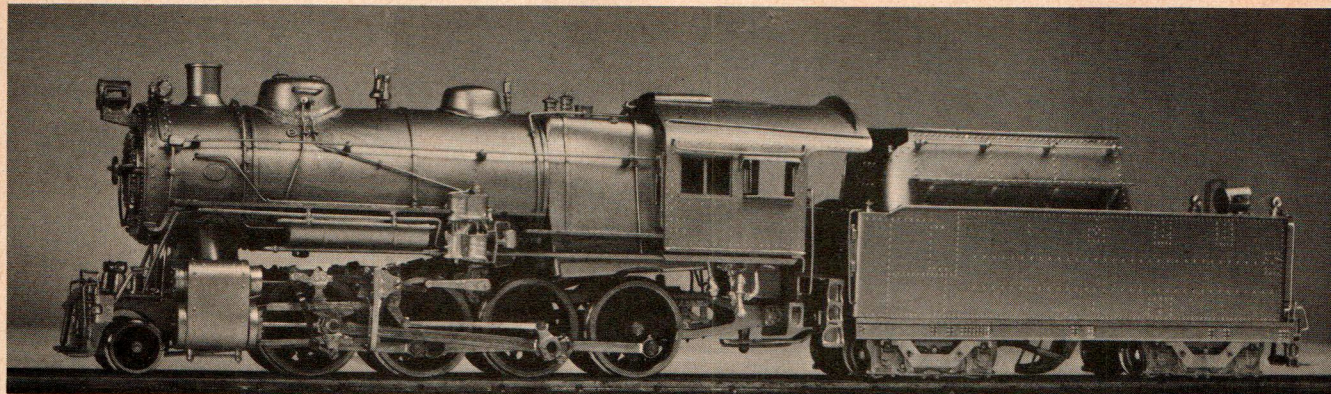




Rob Corrison's Hungry Horse Timber Company has progressed far in 18 months, abuilding atop the second story of a two car garage using conventional construction methods. An unashamed easterner, Ron has to research his logging step by step since Media, Pa. isn't exactly a logging area. Ron lives at Gayley Terr. & Park Ave.

Garnett Howard, Cincinnati, built this HO model of the Pullman sleeper Keystone Banks for Thomas L. Meacham, 1191 Northbrook Ct., Cincinnati, Ohio 45231, using wood and bristol construction. Central Valley trucks were revamped to correspond to type 242 used on the prototype. The interior detailing is done with wood, card, and plastic, and is illuminated with nine grain of wheat bulbs using a wiper style truck pick up providing blink-free light. The model was finished in Tuscan red slides and roof, Pactra flat black underframe, Floquil grime black, and Testors dullcote finish.

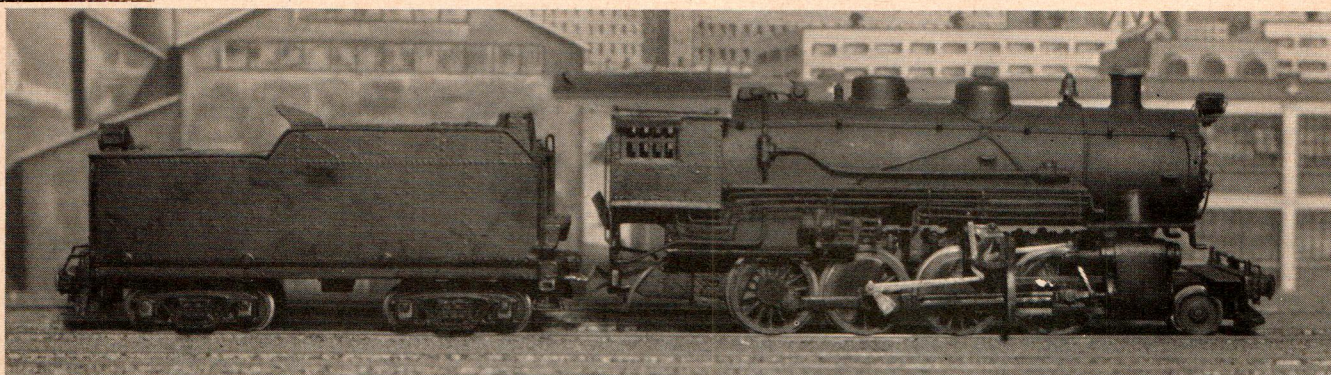



PENNSYLVANIA CLASS H-10S
HO
OLYMPIA-GEM

Pennsylvania Railroad and Long Island Rail Road class H-10s. Similar to class H-8 and H-9. All brass model with coined and lost wax fittings. Enclosed gear box, sprung 62"

drives Japanese motor, wireless drawbar, universal coupler pocket on tender. Minimum radius 20". Overall length 11". Weight 18 oz. Mfd. in Japan by Olympic Precision

Industry Co., Ltd., for Gem Models, 160 West Cheltenham Ave., Philadelphia, Pa. 19144. Catalog No. GN-110, available in 1966. List price \$49.95, ready-to-run satin finish.


USRA CONSOLIDATION
O
HINES LINES

USRA design 2-8-0. Machined, formed, and stamped brass boiler. Underframe cast bronze, machined. Cast aluminum tender shell with bronze cast underframe. Cab formed, stamped sheet brass. Brass turned

and stamped fittings. 2-rail insulated. Motor was not normally supplied with kit. Takes down to 36" min. radius. Mfd. in USA by Hines Lines, Detroit, Mich., during late 1940-early 1950 period. Firm is no longer

in business. For replacement parts, see catalogs of All-Nation, Kemtron, other O gauge producers. Photo by Richard D. Fullerton.


SWITCHER
O
THOMAS INDUSTRIES

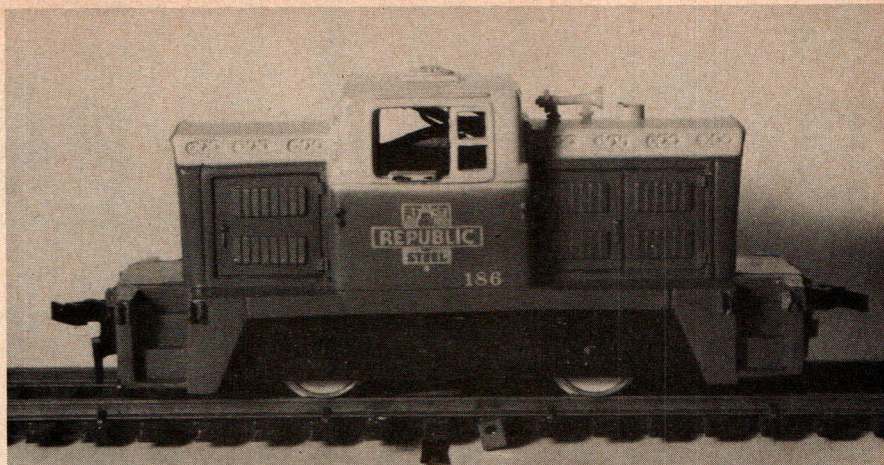
1900 vintage eight-coupled switcher. Boiler of sheet brass, formed, stamped, and turned. Driver diameter 50". Engine and tender length 13 1/4". Cast brass main frames. Die cast zamac fittings. For type tender trucks. Pittman AC or DC motor. Minimum radius

23". 24-1 gear ratio. Drivers steel rimmed. Catalog No. L-2001. Model basically identical with Cat. L-2000 Consolidation kit. Mfd. in late 1940s, through about 1955. Mfd. in USA by Thomas Industries, Shawnee, Oklahoma. Firm is no longer in train

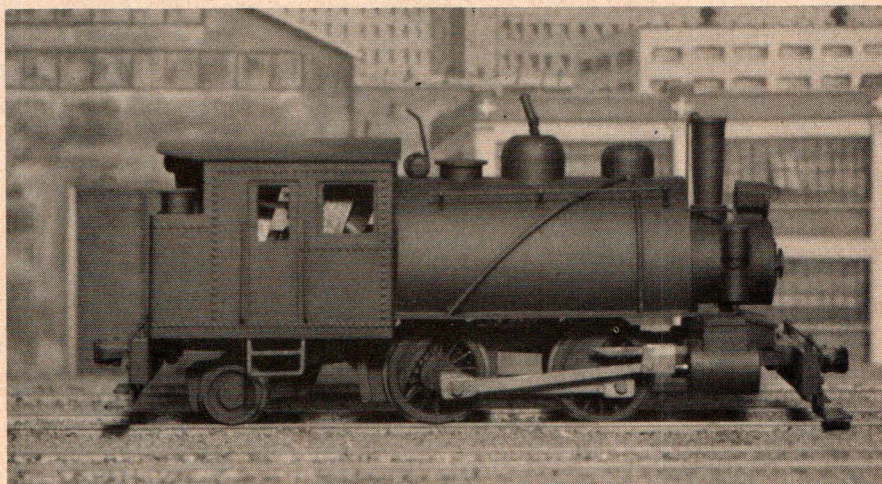
manufacturing business. For replacement parts, consult catalogs of other current O scale loco producers. Photo by Richard D. Fullerton.

PLYMOUTH
MODEL CR-4 SWITCHER

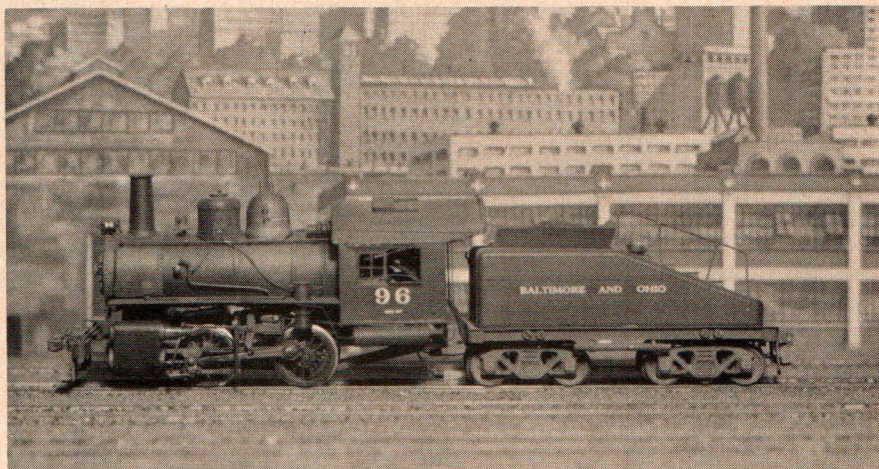
Plymouth Model CR-4 Industrial 4-wheel switcher. Molded plastic and die cast construction. Mantua 5-pole permag motor with nylon worm gear drive. NMRA type couplers. Minimum radius 12" with short freight cars, less alone. 4-wheel drive, lighted. Model introduced 1960. Ready-to run only. Road names: T227A Republic Steel, T227B Union Pacific, T227C General Electric, T227D Westinghouse, T227E R.C.A., T227F U. S. Steel, T227G Bell Telephone, T227H Santa Fe. Mfd. in USA by Mantua Metal Products Co., Inc., Woodbury Heights, N.J. 08097. List price, August 1, 1966, \$7.98. For parts and repair, see any authorized Tyco dealer.


HO
TYCO
SADDLE TANK SWITCHER

Industrial saddle tank 0-4-2 switcher of built up sheet brass construction, stamped and formed. Brass turned and stamped fittings. Dummy AAR couplers. Minimum radius with train, 24" Mfd. in USA by Great Western, North Hollywood, Calif., period of early 1950s. Firm no longer in train business. For replacement parts, consult catalogs of other O scale loco producers. Photo by Richard D. Fullerton.


O
GREAT WESTERN
**BALTIMORE & OHIO
CLASS C-16A**

Baltimore & Ohio class C-16A waterfront switcher. Sheet brass construction with cast and turned fittings. Japanese AC-DC motor. Screwdriver construction. Operating headlights. Slopeback tender. Sprung tender trucks. Minimum radius under 24". Dummy cast AAR couplers. Brass drivers, worm, and gear. Lead weights provided. Optional kit or assembled. Mfd. in Japan for International Models, Inc. Firm is no longer in model railroad importing field. For replacement parts, consult catalogs of other current O scale locomotive producers. Loco was imported during late 1940, early 1950 period. Photo by Richard D. Fullerton.


O
INTERNATIONAL

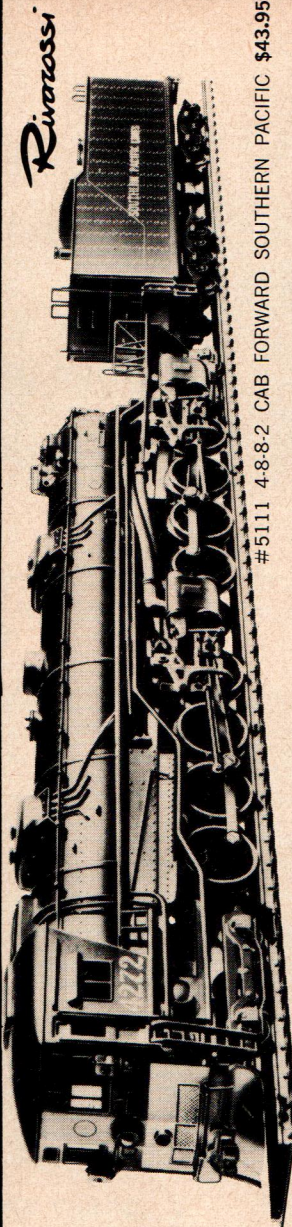
HO MODEL RAILROADING IS MORE FUN... WITH AHM

30 DAY

SPECIAL OFFER

for the month of November only. You select any one of the track gifts when you purchase a CAB forward.

FREE →



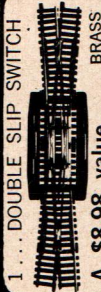
Rivarossi

#5111 4-8-2 CAB FORWARD SOUTHERN PACIFIC \$43.95

YOUR PICK OF ONE OF THESE GREAT TRACK GIFTS FREE WITH YOUR PURCHASE OF A CAB FORWARD



2... #6 REMOTE SWITCHES
A \$9.00 value BRASS



1... DOUBLE SLIP SWITCH
A \$8.98 value BRASS



2... WYE SWITCHES BRASS
A \$9.00 value



12 PIECES... FLEX TRACK
3 FT. BRASS
A \$9.00 value

ONLY \$14.95



PLACE YOUR DEPOSIT NOW
GENERAL MOTORS
EMD E-8
NEW
Rivarossi
DELIVERY FALL WINTER 66 / FOUR ROAD NAMES

ONLY \$15.95



PLACE YOUR DEPOSIT NOW / DELIVERY FALL WINTER 66
NEW
V & T RR
BOWKER

ONLY \$29.95
#5096



AT YOUR HOBBY SUPPLIER NOW
Rivarossi
NYC 4-6-4 HUDSON J3A

The GREATEST LINE UP OF HO LOCOS Ever...

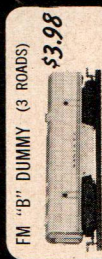
from AHM



MDT (5 ROADS)
\$5.95



FM (2 ROADS) \$8.95



FM "B" DUMMY (3 ROADS)
\$3.98



BL-2 (8 ROADS) \$8.95



KM (2 ROADS)
\$12.95



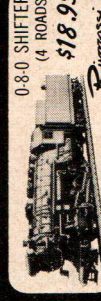
U25C (3 ROADS)
\$16.95



0-4-0 DOCKSIDE
\$7.95



0-4-0 SHIFTER (3 ROADS)
\$12.95



0-8-0 SHIFTER (4 ROADS)
\$18.95



2-8-4 BERKSHIRE (2 RDS.)
\$27.95



2-8-2 MALLET (3 ROADS)
\$39.95

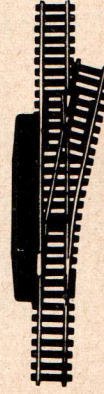


GENOA (2 RDS.)
\$14.95

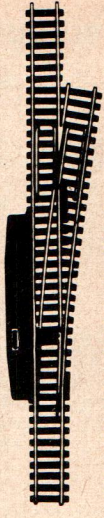


RENO V & T #5070
\$18.95

AHM — CASADIO track and switches are made of the finest materials and craftsmanship. They are thoroughly checked before they leave the factory. A guarantee slip is enclosed in all switches. As our other products, Casadio track is guaranteed for one year. Some excellent features of these switches are insulated frogs, realistic rail profile, excellence of operation, and low drain switch motor. All items available in both brass and nickel silver. Prices shown are for brass, nickel silver slightly higher.



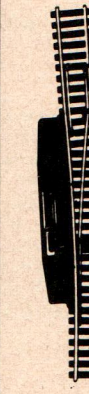
2501 #4 Remote Control R.H. Turnout W/Controller
2502 #4 Remote Control L.H. Turnout W/Controller
\$4.95



2507 #6 Remote Control R.H. Turnout
2508 #6 Remote Control L.H. Turnout
\$4.50



2515 — Remote Control Curved Turnout — R.H.
2516 — Remote Control Curved Turnout — L.H.
\$5.95



2522 — Remote Control "WYE" Switch — 11° Frog
\$4.50

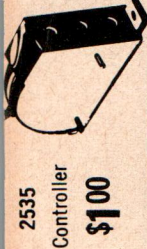


2520 Remote Control 3-Way Switch
\$9.98

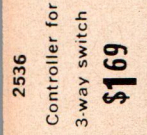


2518 — Remote Control Double Slip Switch \$8.98

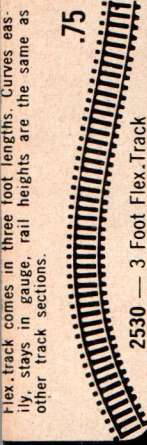
Plug-a-matic wiring is the end to all complicated wiring problems. Color coded wire and automatic plug-in systems will enable you to finish a complicated layout quickly.



2535 Controller \$100



2536 Controller for 3-way switch \$169



2530 — 3 Foot Flex Track .75

All standard sectional pieces are also available. See them at your Hobby Supplier.

THE GREATEST NEW IDEA IN HO IN YEARS... MINITRAINS...

0-4-0 STEAM LOCO #3011 \$6.95

0-4-0 PLYMOUTH DIESEL #3001 \$5.95

CEMENT CAR #3102 98¢

PULPWOOD CAR #3105 98¢

TRASH CAR #3104 98¢

LOG CAR #3103 98¢

DUMP CAR #3101 98¢

BUY SETS AND SAVE! Minitrain sets give you more for your money! All sets include 12 curved sections, one straight section, and one straight terminal section.

#3051 — Diesel, 4 cars and track \$9.98
#3052 — Steam, 4 cars and track \$10.98
#3055 — Diesel, 10 cars and track \$14.98
#3056 — Steam, 8 cars and track \$14.98

COAL CAR #3106 98¢

MINE CAR #3107 98¢

RANGELEY DEPOT B1060 \$2.95

NARROW GAUGE TRACK

#2101 4" Straight \$7 for 98¢

#2121 7" Rad. \$7 for 98¢

#2130 4" St. Term. 35¢

161 Different HO RAILROAD CARS for Your Enjoyment...

OLD TIME GONDOLA V & T #6248 \$1.98

OLD TIME BOX CAR (2 RDS.) \$2.49

OLD TIME TANK CAR V & T #6225 \$2.49

OLD TIME FLAT CAR V & T #6255 \$1.98

OLD TIME CABOOSE (2 RDS.) \$1.98

BOX CAR (18 RDS.) \$1.98

OPEN HOPPER (10 RDS.) \$2.49

TANK CAR (15 RDS.) \$1.98

COV. HOPPER (16 RDS.) \$2.49

REEFER (12 RDS.) \$1.98

CABOOSE (14 RDS.) \$2.49

GONDOLA (15 RDS.) \$1.79

P. T. BARNUM CAR #6234 \$3.95

STOCK CAR (15 RDS.) \$1.98

LINCOLN CAR #6224 \$6.95

DEP. GEN. FLAT \$1.98

OT COACH (4 RDS.) \$3.95

FISHBELLY FLAT \$1.98

OT COMBINE (4 RDS.) \$3.95

1930 SMOOTH SIDE SLEEPER PENNSY 6420 Fall-Winter 66 \$3.98

1920 PULLMAN (2 RDS.) \$3.98

1930 SMOOTH SIDE OBS PENNSY 6421 Fall-Winter 66 \$4.50

1920 RPO CAR (2 RDS.) \$3.98

1920 DINER (2 RDS.) \$3.98

1920 OBSERVATION (2 RDS.) \$4.50

DELUXE PASSENGER CARS — SUPPLY LIMITED!

SANTA FE	PENNSY
#6360 Pullman	#6370 Pullman
#6361 Observation	#6371 Observation
#6362 Baggage	#6372 Baggage
#6363 Diner	#6373 Diner
	\$6.98
	\$7.98
	\$6.98
	\$6.98

WHEEL SETS — We have received many letters asking for Metal Wheels (For AHM Freight Cars) So here they are! 79¢
99¢
(For AHM Passenger Cars)
Metal Wheels will not pick up dirt, go-through switches better, lower center of gravity, and roll much more easily. (Your Loco will pull almost twice as many cars if they have metal wheels.)

CATALOGS — Complete 1966, 32-page catalog shows and describes all items. Send 35¢. Complete parts catalog shows exploded view of all AHM locos and lists all parts. Send 35¢. SEND 45¢ for both.

MAIL ORDERS
Try your AHM Dealer first. If he cannot supply items, send his name and address with your order. On orders of less than \$3.00, add 50¢ handling charges.



Associated Hobby Manufacturers, Inc. • 3200 N. Boudinot St., Phila., Pa. 19134 • Dept. BK

The FINEST HOBBIES from AROUND the WORLD

32 In 1939 Electro-Motive took a stretched out switcher body, put it on road diesel trucks, added steam heating, and created EMD's first road switcher.

Electro-Motive's switcher line possibly gave rise to the old steam fan slogan that "all diesels look alike". Basic characteristics of EMD's switcher design have remained unchanged over a 30 year period. Some understanding of the model designations helps the railroader understand one model from another, and how the lines developed.

The first model to be built at the new EMD plant at LaGrange, Illinois, was a series SC switcher of 600 hp. The other early switcher was rated

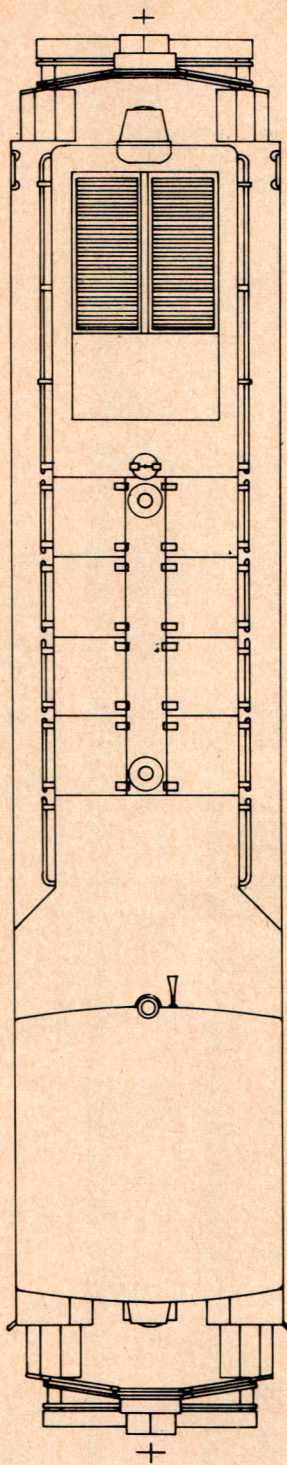
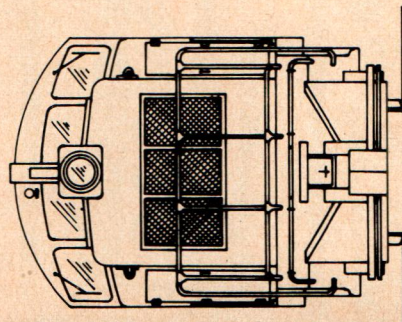
at 900 hp. and was termed NC. Also available in those early years were a model SW and NW. The letter S designated an abbreviated Six for 600 hp., and the N stood for Nine or 900 hp. C or W indicated a cast or welded frame.

About the same time that Electro-Motive introduced the 1350 hp. FT road diesel, they also produced the first of seven class NW-3 road switchers mounted on FT trucks. The NW designation had, with delivery of some NW-2 switchers of 1000 hp.,

lost its original meaning. Model NW-3 used many 1000 hp. switcher components on a stretched out frame, to create Electro-Motive's first road switcher. The FT trucks provided the smoother riding required at road speeds. A steam generator permitted use of the NW-3 in local or commuter type service.

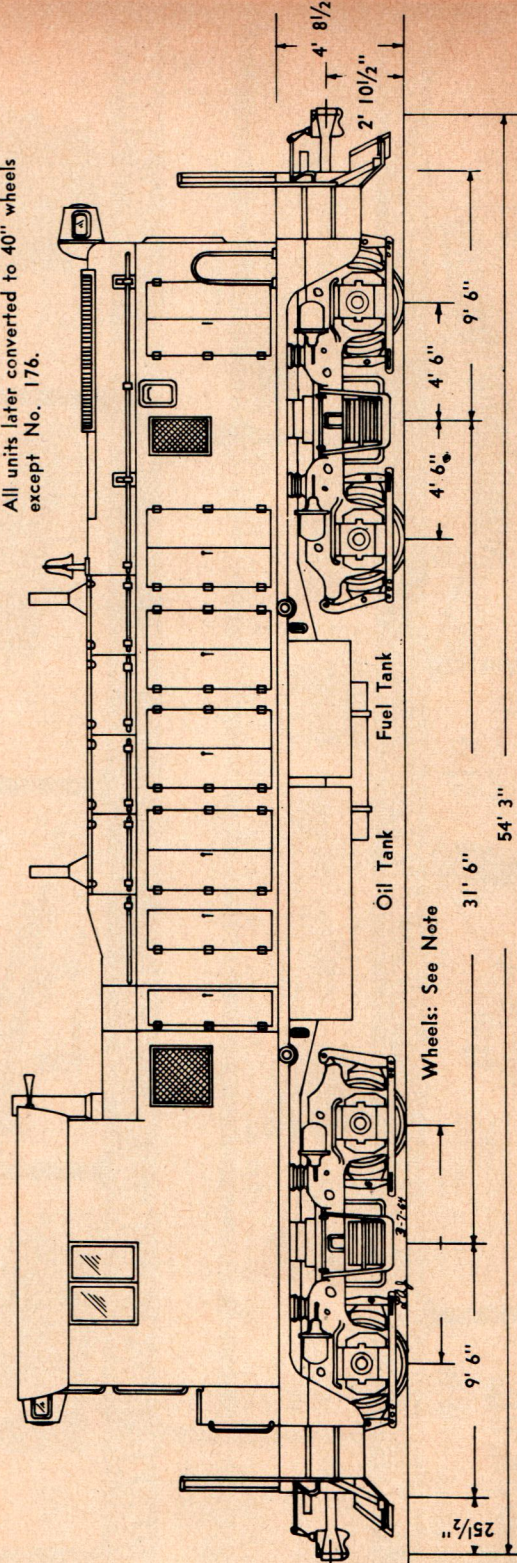
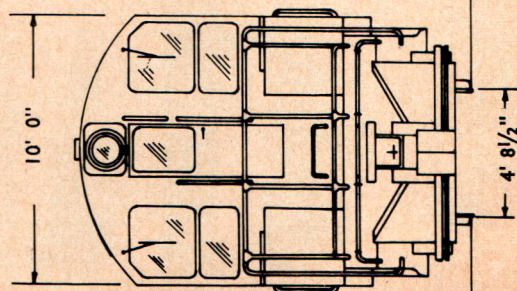
Plans for the 1939 vintage NW-4 built for the Missouri Pacific, and the 1946 version NW-5 have appeared previously in RMC and are reprinted in *Loco 1—The Diesel*.

drawn by Larry Jackman



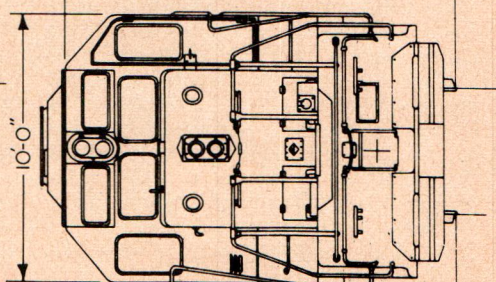
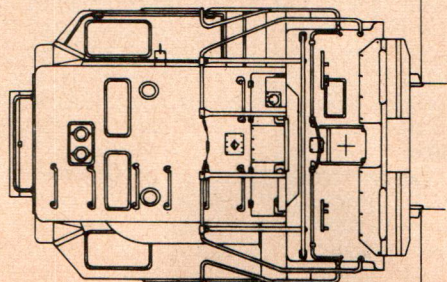
ELECTRO-MOTIVE NW-3 1000 HP. - 1939

NOTE: Locomotives were delivered with 38" wheels. All units later converted to 40" wheels except No. 176.

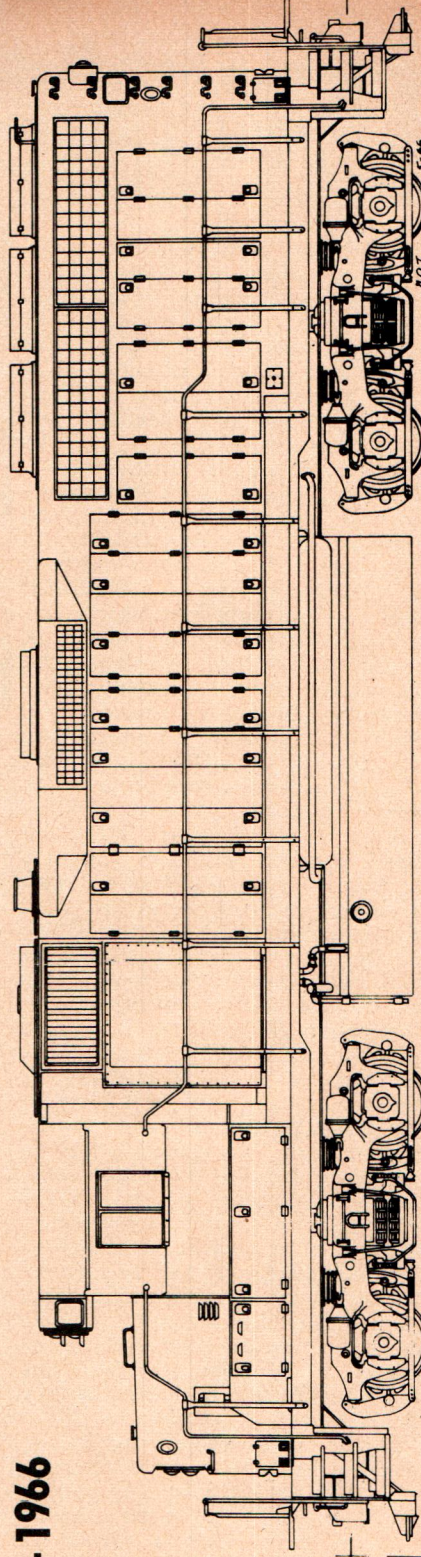
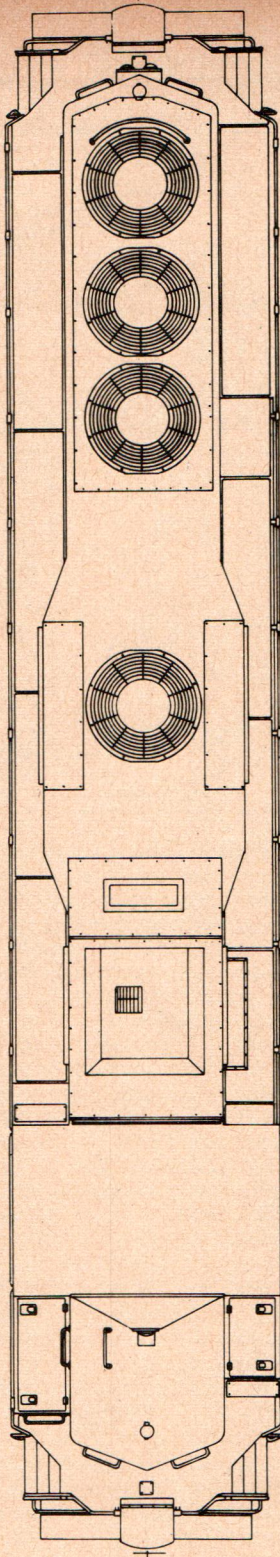


EMD GP-40 3000 HP.

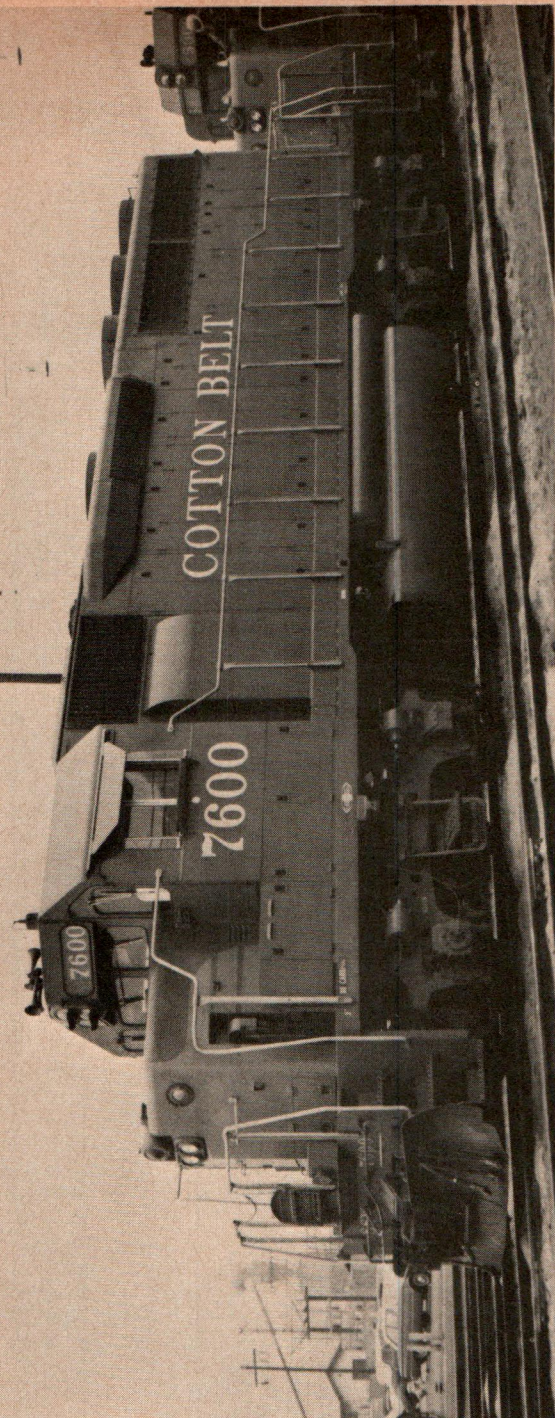
ELECTRO-MOTIVE's GP-40, one of a series of locomotives introduced new in 1966, is equipped with the 645 series V-16 diesel engine rated at 3000 hp. The locomotive also features the EMD AR-10 AC-DC generator which replaced the DC generator used in earlier EMD locomotives. The development story behind the new 1966 EMD line was described in the August 1966 issue of Railroad Model Craftsman.



— 1966



59'-2"



Cotton Belt GP-40 locos are painted and lettered identically with parent Espee in grey with red ends. Locos are series 7600-7607. Interesting is the use of snow plow pilots. Lights are same as SP.

Cape May, Delaware Bay & Cookes Point Ry.

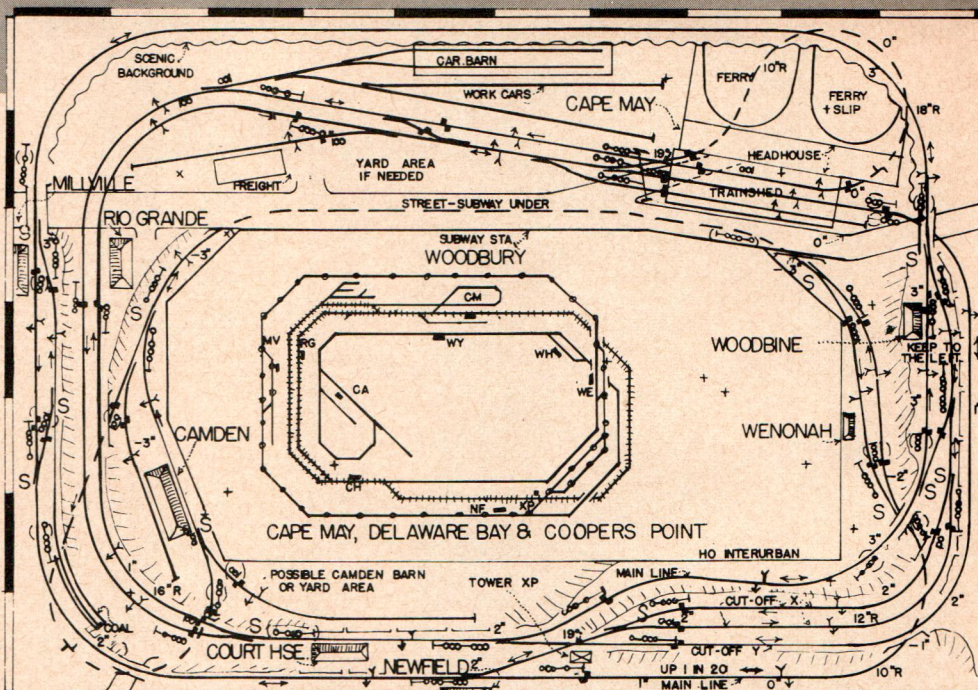
by the layout doctor

AS WE have pointed out on previous occasions, an interurban or street railway line, is single track railroading in microcosm, since only single car trains are run, two or three cars at most, so that sidings can be shorter and terminals less pretentious. From a modeler's viewpoint, and excepting special situations such as end of line loops, the difference between a trolley line (without its overhead wire) and a steam type railroad is negligible or non-existent. Of course, curves are usually wider so that a steam version of CMDB&CP would take up somewhat more room. Yet an all diesel switcher version of the CMDB&CP could duplicate the plan exactly, since a number of one-time trolley lines went diesel.

With that in mind, I present here just such a layout in HO to fit a space 7'0" x 10'2", with operation from an internal operating space. It's called the Cape May, Delaware Bay, and Coopers Point (a slight switch on a long gone prototype car line name) and represents, anachronistically, an interurban connecting the new Delaware Bay ferry connection with Camden, N. J., where there would also have been a ferry connection with Philadelphia. At one time there was an electric line from Camden to Millville, operated by the West Jersey & Seashore part of the P.R.R. with steam trackage continuing via Woodbine and Cape May Court House to Cape May. All of this, less some abandoned trackage, is now part of the P-RSL and operated by diesel.

The name, to be sure, is merely a convenient handle. It had to connect a real or former ferry terminal with some point of importance, for electric lines very often did just that, across the river or bay from any Metropolis from Boston to San Francisco. Matter of fact I started to call the interurban the Pacific Northwestern and had it connecting Sausalito with Eureka (Calif). But having a subway station at Willits seemed a bit more to swallow than having such a station at Woodbury, just within the realm of being reasonable, and not by much, either. If you build such a line you will naturally rename and relocate it to suit your own particular interests.

Curves on the interurban have been kept to a 10" minimum, with other curves at 12", 14", and 16" radius up to a desirable 18". All the switches have 18" radius curves so that Snap-Switches could be used although track divisions for these or for sectional track on the 18" R or straightaways are not shown. Tru-Switches could also be used where manual or electrical control was implied by the lack of an "S" which



indicates spring switch. If overhead wire was used as a power source, then even regular all-rail frog switches, suitably sprung, could be used at spring switch points as well as non-sprung switches. But for spring switches in two rail, only insulated frog switches (such as Snap-Switches) can be used. And by the way, if you like to make your own switches, you can rip Snap-Switches apart so as to utilize frogs and points, mounting them on wooden, fibre, or other roadbeds. The 19" crossings suggested at two points are also available commercially, either fully insulated or all-rail-frog, if you don't want to make them.

At Cape May there is a reverse loop (optional of course) which crosses the outbound track and swings around under the dummy ferry slips and the dummy superstructure of a ferry boat. This presents the car on the innermost track, ready for an outbound run. In times of great traffic, the other two tracks can also be used for holding outbound (or inbound, for that matter) cars. Exit from any of these tracks is controlled by a three-track signal bridge located just outside the terminal and spanning, also, the vehicle entrance road to the ferry slip. For that reason, the inner track has also a dwarf signal just clear of the road, under the trainshed, repeating indication of the bridge signal outside. There is a freight house located on the inbound track, normally backed into by the interurban road's freight motors.

Double track (as so often the case with interurbans and standard railroads) runs out a ways from the terminal, here through Rio Grande to Court House; full name, Cape May

Court House. The end of double track could mark the end of a local service out of Cape May, with quick turn-arounds to keep cars out of the way of other traffic. Single track extends from Court House to Woodbine where there is a strange keep-to-the-left passing track, with spring switches. The reason for keeping to the left will be explained later. This and other passing tracks could hold a maximum of two long interurban cars. Of course one car could stay on the siding while a "long" freight or passenger train ran by on the other part of the siding.

From Woodbine, a long single track runs along behind a scenic background to Millville, where there is another sprung passing track. The background should be high enough to conceal the existence of a track behind it: since that track is 3" above the ground there, another 3 or 4 inches would be needed to conceal overhead wire, making an optimum background height of 7". Single track runs from Millville to Newfield and then drops down a steep grade to negative elevations, -2" to -3" through Wenonah, and at the latter elevation through the Woodbury subway (!) to Camden where cars round a reverse loop under upper trackage to enter the station ready to head right out again.

There is one storage spur behind Camden station, plus a "yard" spur with sprung switch on the other side of the station. There is space, however for more of a yard or barn if desired. Similarly at Cape May, there is space for a yard if more freight service is to be operated.

So far I have described a pretty straightforward single track, point to

The interurban railway is single track railroading in microcosm, with sidings being shorter, terminals less pretentious, and trains usually three cars or less. This layout doctor design packs in plenty of operation plus a ferry terminal. With some track simplification, the same design could also be used in the same space for 0 gauge.

point operation. You could keep four or five interurbans running on this layout with the passing tracks, double trackage, and reverse loops, and maybe more. But a point to point layout is vastly improved by the addition of "cut-offs" or "sneak-offs" or "hidden connections" to permit continuous round-and-round running. I was able to add to the CMDB&CP two such cut-offs. The first is the reason for keeping to the left at Woodbine passing siding—the switch to the cut-off is on the track that keeping to the left, on the oval to be described, leads to. This oval or round-and-round run is Millville-Newfield-Woodbine-Millville etc. Because the Woodbine passing track is not used for passing when this run is in operation, I have had to install a standard keep-to-the-right passing track on the "cut-off X" between Woodbine and Newfield.

Another continuous run oval can be made by extending one of the Cape May terminal tracks, as I have done, under the main line, up-hill via "cut-off Y" to Court House. This gives a continuous run as follows: Cape May-Rio Grande-Court House-Cape May etc. It has one long section of double track and no other passing tracks, but two cars could be run in opposite directions when continuous running was desired, just as two could run on the previously described "oval."

The two "cut-offs" cross on the level at 19° crossing at Tower XP. It has occurred to me that if this crossing were replaced by a double slip-switch (such as Fleischmann's if you want to buy one R-T-R) a greater variety of operation would be possible. You might like to work this out: actually, it boggles me.

Now I have shown all over the layout, many, many sets of two insulated rail joiners by black blocks, as well as track feeders by means of the standard arrow-heads and -tails (with those to reversing sections just lines, without the heads and tails). This means that if the road were to be operated by 2-rail, a rather large control panel would be required, with at least on-off control for each such sections, which are so numerous I did not letter them. It is probable that some form of cab control would be desirable, with eventually a version of automatic control. While I could draw this up for you, off the top of my head so to speak, it would be of little use to you without an elaborate explanation, requiring at least another article. For any automatic control circuit, signal circuit, etc. YOU should understand what it is all about and design and build it yourself, otherwise troubleshooting—when required—will become onerous.

RAILROAD MODEL CRAFTSMAN



Lehigh Valley Transit three car railfan special in the hole for a regular train in a Hal Carstens photograph. A ride in the rear lounge seat of Cincinnati lightweight No. 1030 was a thrill to be remembered for a lifetime by any traveler.

My own preference for an interurban would be to run from overhead wire. Thus the two running rails would both be grounded or, alternately, one could be grounded with the other used to operate signal and control relays by a fairly simple and foolproof system. Hanging overhead trolley wire is not at all as hard as it sounds and if I move house soon, as hoped for, I'm going to build an overhead trolley system again and photograph and write it up to show how easy it is. IF you do install overhead trolley, my suggestion would be to have NO insulated rail joints, but to make all insulated breaks in the overhead system. These are simple to do and, in addition, can be moved as desired just by rehangng a few feet or yards of trolley wire. The trolley wire cannot be continuous anyhow, so my recommendation is to hang it in three, four, or five foot lengths, connected by insulators, wire contactors (for signals and switches), wire-frogs, and plain splices. Insulators would then be located in the overhead approximately where the twin insulated rail joiners are shown on the plan.

I have also shown, again, three-color light signaling, if you want to add it—or at least have the signal masts, not wired, at approximately the right places. In this I had the assistance of my son, Walter, who is more familiar with railroad signals and operation, where spring switches can be turned manual for contrary movements. He had me put in signals on the single track ahead of each passing track, as well as dwarf signals on each passing track for possible move-

ments out of the sidings from the "wrong" track.

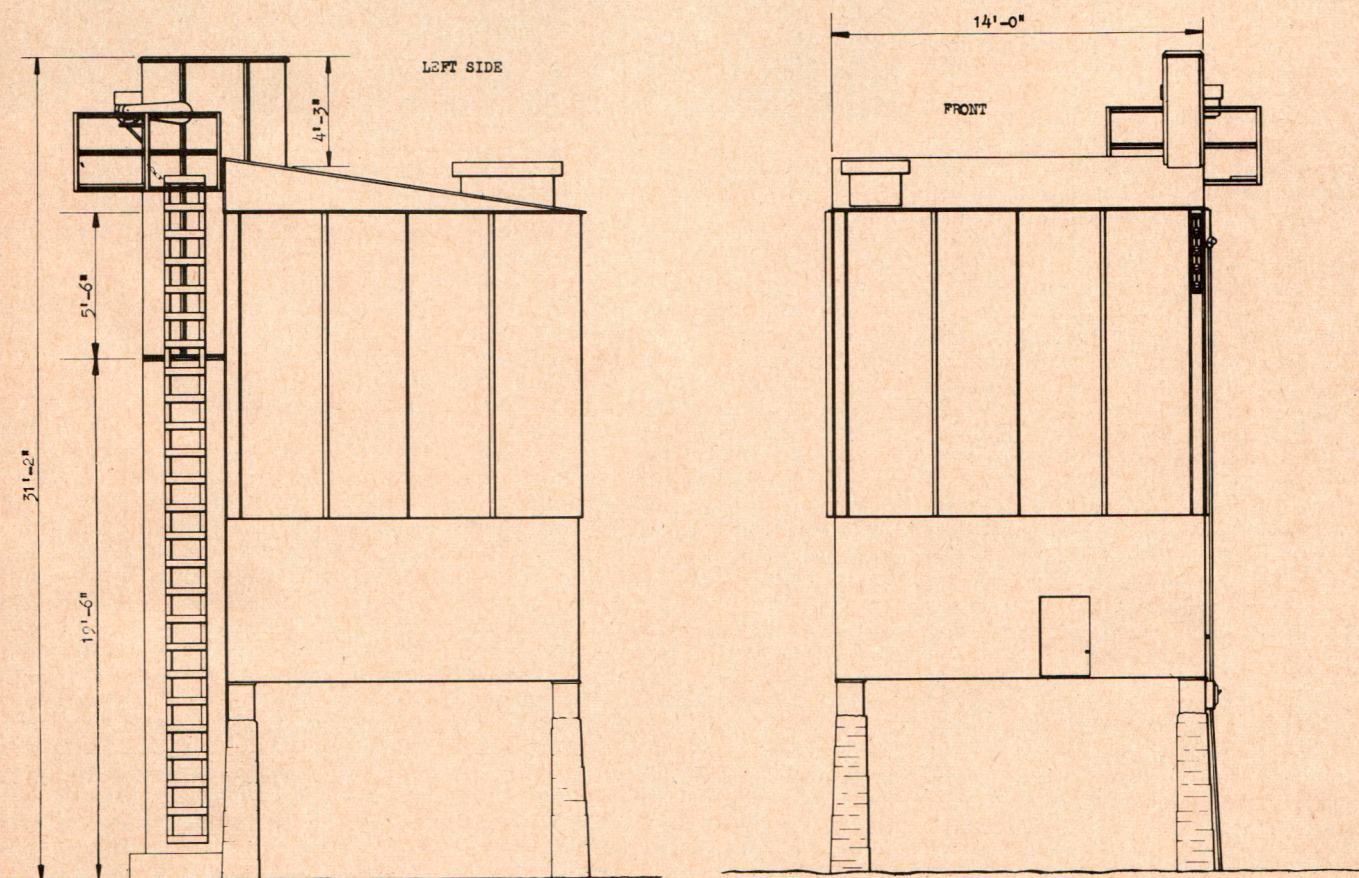
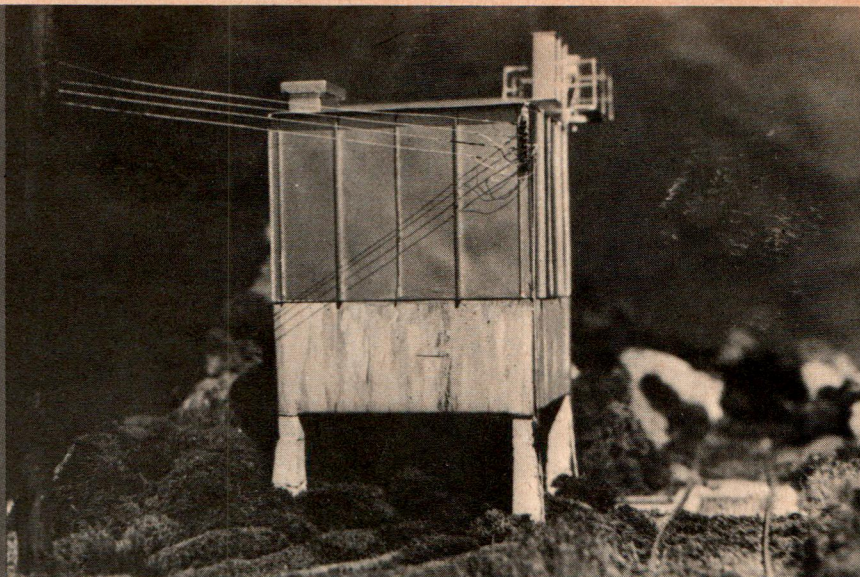
Of course one of the charms of running a model interurban or trolley line is that you can have spring switches which do not need any controls. While they could be there in theory, they would not be there in practice. A quick count shows me twelve spring switches on the Cape May, Delaware Bay, and Coopers Point, all fairly important, yet none needing controls reserved for secondary switches. At loss of some flexibility in operation, quite a few more switches could be sprung. I have, accordingly, indicated the signals and dwarf signals that would not be needed with spring - switches - strictly - sprung - not - manual operation in parentheses. A couple of other signals which would not be visible to spectators because of their locations, have also been parenthesized. And, by the way, if you don't put up any signals, even dummy ones, you are running trains (a) by cab signals—unlikely on an interurban; (b) timetable and train orders; (c) by manual block—call up dispatcher from every siding and junction.

A schematic diagram of the whole interurban is given in the center of the drawing. On this, I have marked one of the continuous runs, via Cape May with cross-hatching, the other, via Millville with little circles.

One of these days I want to take the general layout idea of this interurban and put it in steam railroad form. Wonder how much more space it will take with larger radius curves, gentler switches, and more elaborate terminals? 🚂

CEMENT STORAGE PLANT

by Dale Bartholomew



INDUSTRIES are an important asset to all railroads. The roads having the greatest number along their right-of-way are generally the richest. Model railroads also need many industries to indicate a purpose for their existence and to provide for plenty of switching action. Factories, mills, and other car load producers are quite often large and cannot be reproduced in the limited space available to modelers; thus, the ideal industries for modeling purposes are those that take up a small area but produce a high number of car loadings. Presented with this article are

plans for a cement storage plant that can be packed into a prototype area of 20'x30' while providing a spotting position for one or two covered hoppers, plus reason for several traveling out on the road.

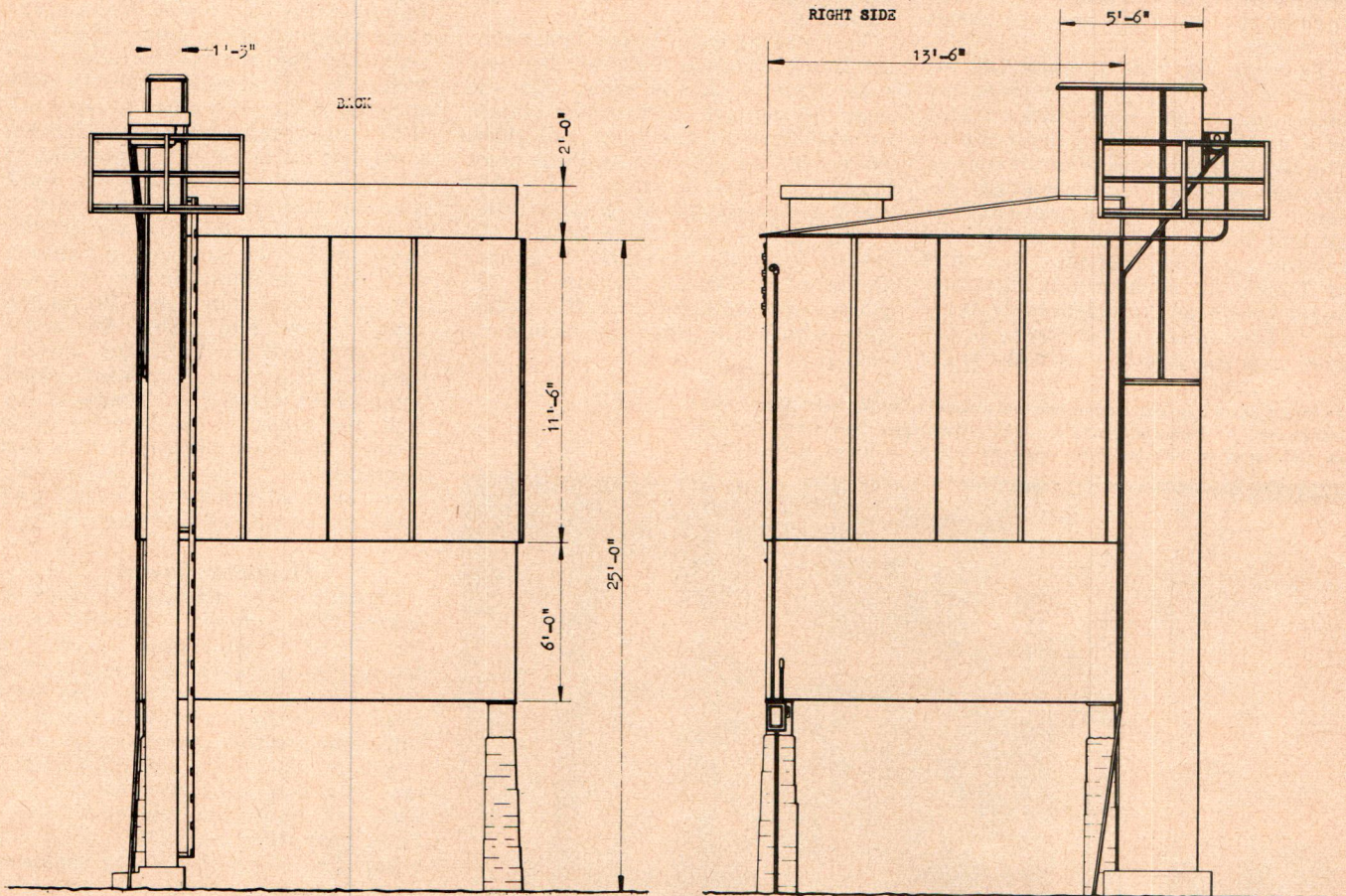
A photograph of this plant was found in a magazine with no other information provided except an east coast location. The plans, therefore, were produced from the information shown on the photograph using a method known to draftsmen as perspective drafting; but in a reversed procedure. The plans may vary slightly from the actual prototype dimen-

sions for this reason but in general should be quite accurate.

For reference purposes, I have spilt the plant into four sections: the *bottom section*, consisting of the four corner legs; a *central section* with a smooth but dirt-streaked exterior; the large sheet-metal covered *top section*; and the *roof*. The naming of front, back, and sides is purely arbitrary, but useful by way of description. Since the back of the structure cannot be seen, it is assumed in the plans that the construction is similar to that used on the rest of the bin. The only additional item was a ladder to

The author built his O scale model in brass but wood shapes would also make a fine replica. Plans are shown full size for HO.

Front and back views of the author's cement plant model show its relative simplicity. Author built his model from brass and Special Shapes strips and angles. Model could also be made using wood shapes from Northeastern. Legs are of plaster.



allow a person to reach the catwalk at the top of the elevator tower. This was made of wood construction for the simple reason that wooden ladders are easier to model; however, a metal version may be substituted at the discretion of the modeler. Dimensions are, in general, given to prototype lengths for the ease of modelers in all scales, with the exception that material thicknesses and sizes are those required for an "O" scale model. Half these values for "HO" scale. The construction material used was brass, but others could be substituted.

Construction

I started the construction of my model by cutting out the eight main side panels of the top section from .010-inch sheet brass. the easiest method for making these panels is to cut a strip of brass or other construction material to the 11'6" height, then mark and cut each section to width one at a time since the saw thickness wastes a slight amount of material. I suggest you number the sections and plans correspondingly. Figure 1 illustrates a suggested framing procedure. The channels at both edges of the front and back edge of the left and right sides are partly

formed from the side plates of the adjacent wall (N on Figure 1). This leaves an ell 6"x2" which must be made to form the remainder of the channel. Cut and shape these from the same strip of .010 brass as was used for the side panels. Save these pieces. Cut and shape four ells of 6"x2½" dimensions from .006-inch sheet brass. These will form the reinforcing edge at the center of each side. Pick one of the main side panel sections for each side and solder this ell flush with one edge.

A skeleton frame must be made to support the main side panels. To begin

I suggest using two channels of brass shapes of some kind, with their length a little longer than the width of the front. File a notch deep enough and long enough in each to clear the center ell. Solder one of these channels near the top and one near the bottom of one of the front panel sections. Butt the next section to the first and solder it in place. Make sure that they are straight and even at the top and bottom. This forms most of the front wall which is facing down in Figure 1. You may want to solder a smaller angle or channel vertically between the two skeletal frame channels toward the edges of the larger sections to keep them from warping (M on Figure 1). Use whatever scraps you have available. Fasten in place the two 6"x2" ells at the ends with the 2-inch ell next to the side plate as at N. With your razor saw cut the skeletal frame channels flush with the ends of the assembly you now have, as shown.

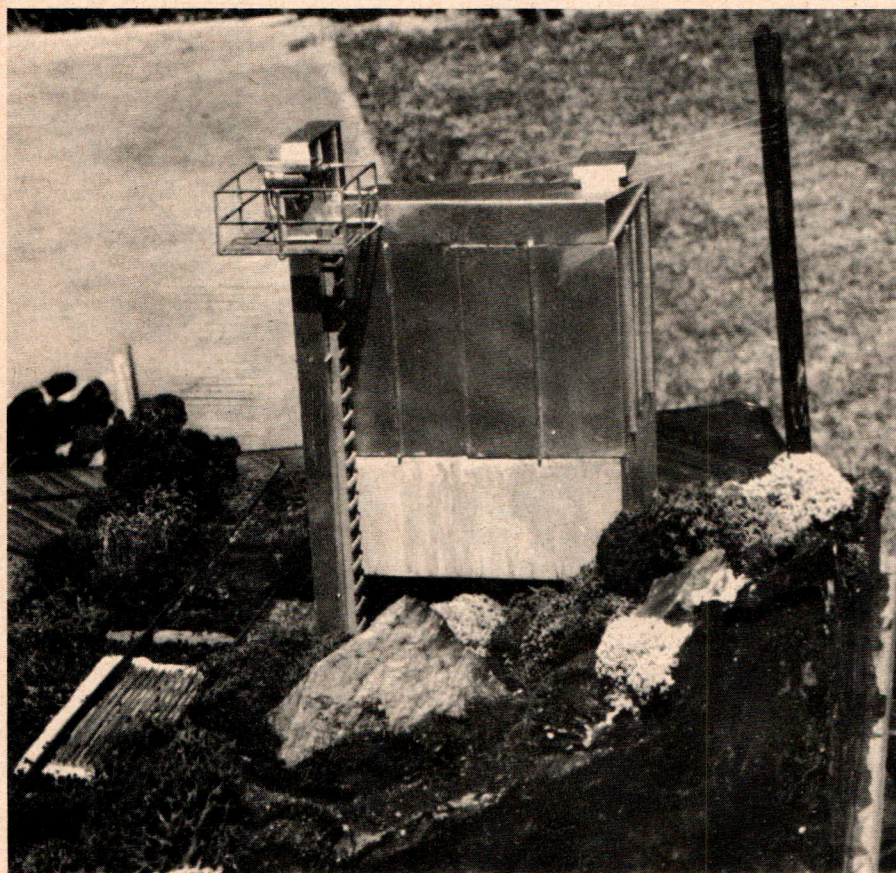
To begin the side framing lay the front face down on a flat surface and solder one of the side panel sections at a right angle to the front plates. The flat surface will aid in preventing the side section from protruding farther than the 2" leg of the ells. The ell and the side plate form the end reinforcing channel of the bin (see N on Figure 1). Fashion two right triangle braces of .016-inch sheet brass and solder flush in the corner to insure that the side is at a right angle

to the front. Cut two more skeletal frame channels, file to clear the center ell, and solder to the side panel section already in place. For strength, fasten these flush with the channels of the front section and solder to the right triangle braces. Make sure the frame channels will extend past the end of that side. Solder the next side panel section flush to that already there, then the 6"x2" ell to that. Solder in cross channels if needed to prevent warpage, as you did on the front at M. Cut the skeletal frame channels flush with the end of the side wall that you have now. Repeat the procedure for the opposite side. For strength at this point in the construction it might be necessary to solder a reinforcing channel between the two sides toward the loose ends to insure that they are parallel to each other. This brace is shown in the photograph of the partially completed structure.

To form the back, solder two skeletal frame channels between the two sides flush with the ends. Put one near the top and one near the bottom as was done for the front and sides. Solder the back panels on these cross channels. Leave a crack 1'-3" wide for the elevator tower to slide into.

The eight heavier side braces can be cut to 11'-6" from Special Shapes Co. brass 1/16"x1/32" flat bar for "O" gauge, or 1/32"x1/64" for HO gauge. Solder these in place on each main side panel.

Author's model is built on a movable scenic block, permitting easy installation or removal from a layout. Prototype had metal ladder as compared to wooden type used by author in his O scale model.



The Central Section

Cut three pieces of .016-inch sheet brass to form the left, right, and back sides of the central sections of the bin. Make these about 1/16" higher than shown on the plans. No notch is necessary in the back for the elevator tower in this section. Slide these under the top section, the 1/16", and solder in place. Solder along the corner where the sides meet. It may be necessary to place an angle in the corner for strength and to provide a soldering surface. Fill the cracks and file smooth. To form the front with its recessed door, cut another piece of .016-inch sheet brass the same height as the others but with a length equal to the distance from the left side of the bin to the right side of the door. Cut out a rectangular notch the shape of the door in this piece. Cut another piece of sheet brass to form the remainder of the front section. To join these two plates, fashion another strip of sheet brass the same height as the others and about 1/2" wider (for "O" gauge) than the door opening. Solder this plate to the back of the first front panel formed in such a way as to leave 1/4" extending to the right past what will be the right edge of the door. This provides a splice plate to solder the right front panel section to, and also a backing plate for the door. Solder in place the right front panel and fill in the cracks above and below the space left for the door. Sand the surface smooth. Cut a piece of .006-inch sheet brass to the rectangular shape of the door and sweat to the backing plate to form the door proper. Solder this assembly to the rest of the model. Make sure all sides are straight and that the bin will sit flat when set upright.

Elevator Tower

I continued by making the elevator tower. This extends vertically from the pit to a point 31'-0" from the ground, at the back of the bin. The sides were formed in two main segments. The first or lower segment runs from the pit up to the horizontal brace, or 19'-6". Part of this length will extend into the concrete pit. The width of these side pieces is 3'-1". Form both sides from .010-inch sheet brass. The sides of the top segment were made in the form of a rectangle, 11'-6"x5'-6" from the same thickness of sheet brass. Cut a notch in these to clear the channel skeletal frame of the top section of the bin. Solder these two side segments of the tower together with a splice plate behind them. To form a surface to solder the end or back wall plates of the tower to, cut eight pieces of rail material to a length equal to the inside spacing of the elevator tower sides or 1'3" minus the thickness of the side plates. These will also act as spacer blocks between the two side walls. Solder four of these along the back wall of the tower .010 of an inch in from the back edge of the sides, .010 of an inch in from the front edge of the visible

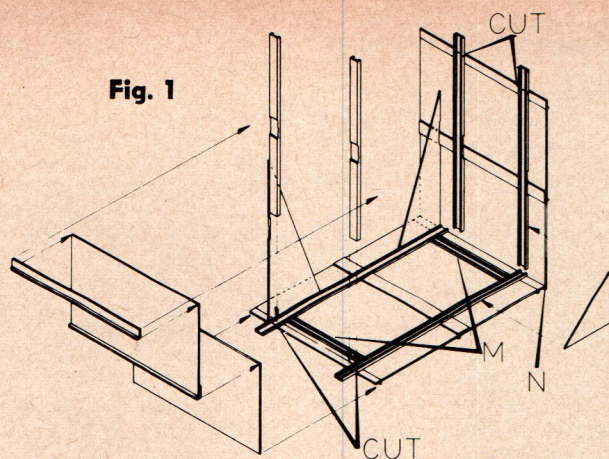


Fig. 1

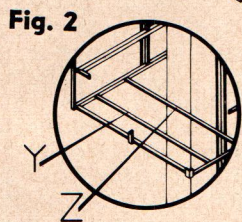


Fig. 2

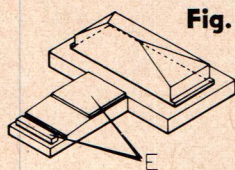
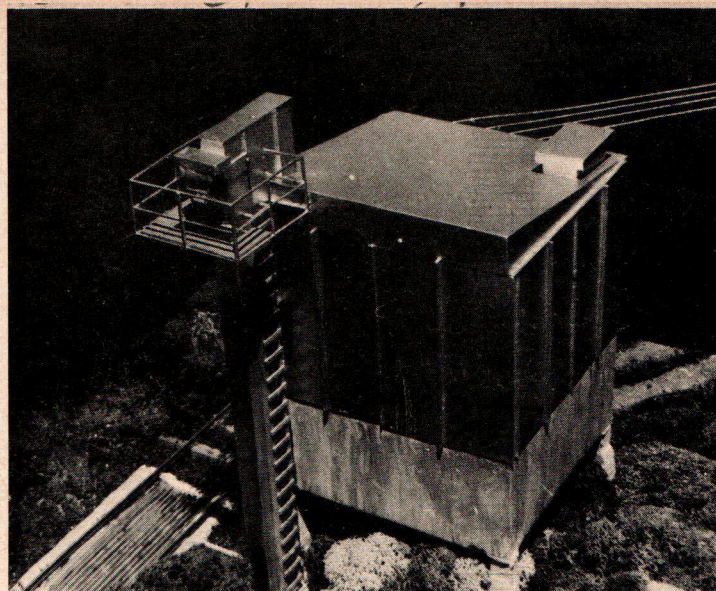


Fig. 3



rectangular top segment, and two .010 of an inch in along the visible lower front segment.

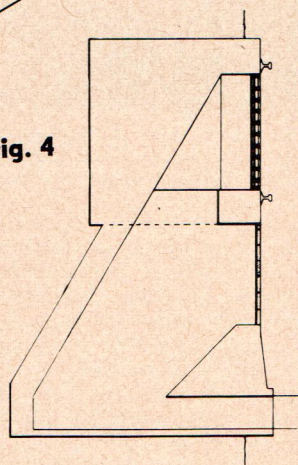
Cut three strips of .010-inch sheet brass to a width equal to the lengths of rail used. One of these is to be 31'-0" long to form the back wall of the tower. The other two for the front of the tower should be just long enough to cover the visible surfaces. Solder these strips in place to the rails, fill the cracks, and file smooth. Lay the tower assembly aside temporarily.

Roof

Cut and solder two Special Shapes Co. 1/16-inch ells to the top of the bin on the left and right sides with one leg of the ell protruding over the face of the bin. Shape the sloping right side of the roof from a piece of .016-inch sheet brass, adding an extra 1/16 of an inch to slide below the wall of the bin. Cut a rectangle 2'-6" by 1'-9" from .016-inch sheet brass. Solder this to the back of the roof side just formed flush with the top and back edges. This will act as a filler plate between the right side of the roof and the elevator tower. Fasten this assembly in place at the top of the right side. The excess 1/16" provides a soldering surface. Insert the conveyor tower in the notch provided and solder in place keeping all parts aligned properly. Cut and solder in place the left and back sides of the roof. Do not forget the extra 1/16 of an inch in height. Cut a sheet of .010-inch brass 14'-0" wide to form the roof. Notch to fit around the elevator tower and solder in place. It might be necessary to solder angles to the roof sides to provide a soldering surface.

To begin the air vent, cut and shape two pieces of .010-inch sheet brass to form the left and right sides. Solder a Special Shape Co. 1/8-inch ell

Fig. 4



to the top and bottom edges to provide a soldering surface. Fasten these in place. Their position can be marked out lightly on the roof in advance. Next cut two plates from .010-inch brass to form the ends and solder them in place. The top, or lid, on the air vent was made from one piece of .010-inch sheet brass by first forming a rectangle with sides 6"x4'-6" in length. Cut out 6" squares from the corners and bend down the edges to form the 6" sides. Solder the corner cracks shut and sweat solder to the rest of the vent.

Looking ahead, I felt it would be easiest to model the bottom section, or the legs of the bin, from plaster. To serve as reinforcement for these legs solder a 10" (5" for HO) piece of brass wire to each corner inside the bin. About 1/2" of this wire should be used to fasten with the 9 1/2" remainder hanging down out of the bottom. The bottom plate can be fastened to the bin in several different ways. I cut out a plate 1/8" larger than the bin on each side. This excess was then bent up to form a soldering surface. Cut a 1/4" square notch out of each corner of the plate to clear the four corner wires. Solder the bottom in place. To form the plates under each corner of the bin cut four pieces.

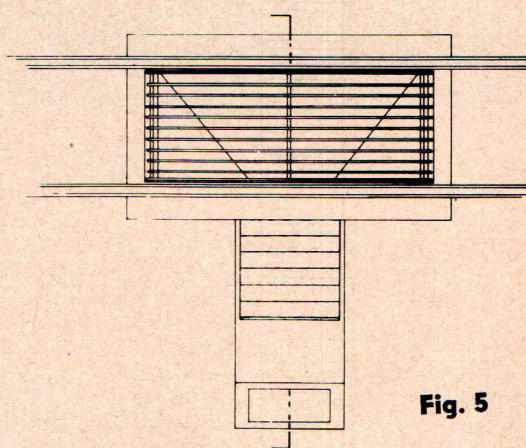
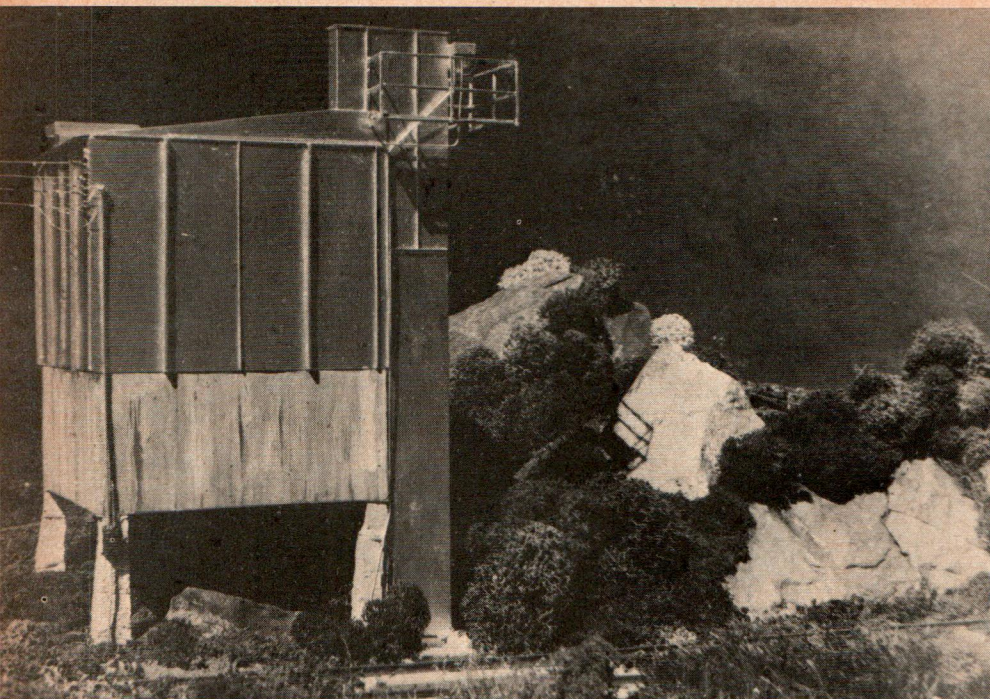


Fig. 5

of .016-inch sheet brass into squares. These should have sides that are a little over one foot in length. Drill a hole in the center of each large enough to slide over the corner wires. Solder these in place on the bin with a slight amount of overhang over the exterior edges of the bin as is shown on the plans.

Continuing, we return to the elevator tower. Cut and solder in place the six ells on the tower sides (two vertical and one horizontal on each side). I made these from 1/32"x1/32" Special Shapes Co. brass angle stock for my "O" gauge model. Leave a notch for the belt guard in one angle on the left side. I made the motor in a drill press from a piece of brass bar. You may be able to use scraps or have one available. Fashion a motor platform and brace from .016-inch brass. Solder this and the motor in place. Finish the motor details by forming a cover from one piece of sheet brass by the same process as was used for the air vent cover. The belt guard can be made by using a double thickness of .016-inch sheet brass cut to shape. Form a rectangular piece of 0.16 sheet brass to serve as the top or roof of the tower. Solder all pieces in place.

Fashion the guard railing from the



Closeup view shows the cast detail of the four plastic legs, each of which is different and requires home made molds. Legs could also be carved from blocks of balsa wood but would lose realism.

same angle material as was used on the sides of the tower. Use a light soldering gun and solder these pieces together as clean as possible. I made the top, middle, and bottom rails for all sides from one piece of angle stock with the corner and middle uprights soldered to these. Cut out the flange of the railing to 45° where the corners will be to allow for bending. Since the tower was heavy, it absorbed most of the heat causing some difficulty while soldering the light rail in place. For this reason some modelers may want to try gluing the rails in position. Cut two more angles the length of the railing on the back side. Solder one of these between the two bottom side rails and to the back of the tower as shown in Figure 2-Z. Solder the other toward the back of the railing as shown by Y. This will support the walk planking. Cut, shape and solder in place the two conduits leading to the motor. Make sure the one is long enough to extend into the ground. While you are at it, fashion and solder in place the short conduit that enters the switch box. This should extend about 1/8" past the bottom of the bin.

If you desire to add more electrical details, cut a piece of .016-inch sheet brass to make the backing plate or rack that the insulators for the power line are mounted on. Solder this in place. The rest of the insulator rack has basically three parts. These are the solid shaft that passes through the insulators, the insulators themselves, and the "U"-shaped brackets that hold the solid shaft to the backing plate. The solid shaft was formed from stiff piano wire, while the five "U" brackets were made of soft .010-inch copper wire. Make the "U"s of

sufficient length to pass through holes which are to be bored on each side of the backing plate. The insulators were made with beads. For ease of construction all these parts can be glued in place using Epoxy glue. To begin, fasten in place the top "U". Slide eight beads onto the piano wire and slip one end under the top "U". Fasten down the opposite end of the piano wire with the bottom "U". Glue in place the remaining "U"s leaving two beads between each.

Hook four pieces of fine copper wire that will form the power line around the piano wire and between each pair of beads. Loop this back around itself a short distance and twist together. Slide the beads and fine wire down to the bottom of each section between "U"s. Fill in the crack between each pair of beads to shape the insulators. Just let these wires dangle until the model is mounted and you can connect the ends to the pole. Cut a piece of stiff wire to form the conduit that brings the power from the insulator rack down to the switch box. Wrap four fine wires around the very end and solder, leaving a ball of solder to form the service head. Fasten this to the side of the bin. It also should extend about 1/8" below the bottom of the bin as does the shorter conduit.

The Bottom Section

The legs for my model, as stated before, are made of plaster. This proved to be a tricky operation, but as yet I know of no better method to form the legs with all their irregular detail. A separate mold was required for each leg. These I made from short strips of balsa wood. Since two sides of the legs are straight and two slope outward becoming wider toward the

bottom, two sides of the mold have to have each separate balsa strip cut a little longer than the one just above. One exception is the leg immediately in front of the elevator tower; however, it can be formed in the same manner as the others. I suggest using plastic glue to anchor the wood strips since when used on wood it becomes rubbery when dry. This allows the mold to be taken apart easily to remove the final casting with little damage. Form the legs a couple of feet longer than shown on the plans so that they can extend into the scenery below and be anchored. Pouring the plaster would not be much of a problem except that a piece of perfectly-straight and smooth piano wire must be placed through the center of the castings to form a hole for the anchoring wires hanging down from the bottom of the bin. The plaster must be thin when poured so that it will run to all parts of the mold. Insert the straight piano wire quickly after you pour the plaster. Tap the mold lightly at a solid point with a hammer to encourage the plaster to settle to all corners and to remove air bubbles. When the plaster is about 50% dry remove the piano wire leaving a hole through the entire length of the casting. Peel off the mold carefully and remove the leg when the plaster is completely dry.

It will be necessary to form a base to support the bin upon and to anchor the legs at the bottom. This can be made from almost any scraps you have available since it can be covered with your scenery material. I cut out a square from sheet brass about an inch wider than the bin on each side. Mark where the four corner legs will rest and drill holes for the reinforcing wires to pass through. I strengthened this plate with channel stock soldered around the four sides. Slide the four legs over the reinforcing wires, then slip the frame over and pull it down tight against the legs. Bend the wires over and solder them to the frame. This makes the model a complete and fairly rigid unit. I had a bit of trouble with the brittle legs breaking while attaching the base, but found that they could be glued back together with white glue. Once the base was cinched up tight and fastened, I had no further trouble.

Dump Pit

I had to guess as to what the dump pit's shape was, so my design is entirely free lance. Figure 3 shows what my pit looks like looking straight down from above. Figure 4 shows what a cutaway of the prototype might look like, but in modeling I casted only the portion that shows above the ground level. My casting is solid beneath the planking with a notch made just deep enough to accommodate the boards. Figure 5 shows a mold for the pit with the side forms removed. I made this mold from separate blocks of wood. The blocks marked "E" will form notches in the

finished casting for the board planking and for the lower end of the elevator tower to slip into. After the casting is dry if the thin edges around the planked area break away as they did for me, replace them with strips of wood. Fill the cracks with glue and smooth the wood so no grains show. It might be easier for you to make the pit entirely of wood.


My model and scenery is anchored to a portable mounting board with plaster holding most parts in place. Anchor the pit first. I leveled it on the board with a small level and then poured plaster all around it. Insert the bottom end of the elevator tower into the notch provided. It may be necessary to chip off part of the lower left-hand corner of the pit to clear the bin leg and base. True up the bin to the pit and pour plaster around the

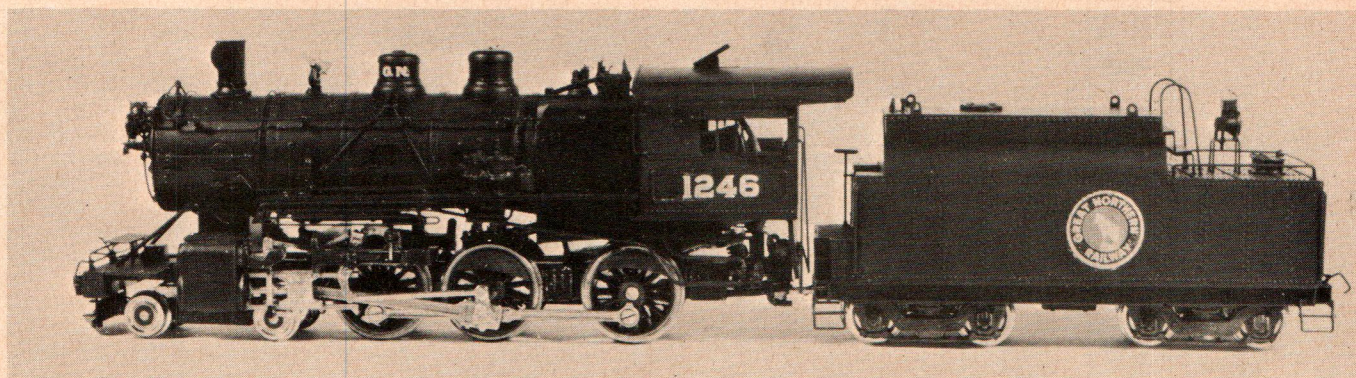
legs to anchor the bin in place.

Make a switch box from a piece of wood and two rectangular plates of .010-inch sheet brass. One plate should be smaller than the other with the smaller soldered symmetrically over the larger. Glue this brass lid to the block of wood. Drill holes in the wood for the two existing wires or conduits and one for the conduit extending out of the bottom to the ground. Fashion a switch handle from small diameter stiff wire and mount it on the side. Slide the box over the two upper conduits and glue it to the bin leg. Insert the conduit that extends to the ground and anchor with plaster at the base. This finishes the construction process.

Painting

I primed my model with Floquil's

primer, sanded it smooth, and sprayed it with Pactra silver paint. The center section was painted with dark and light grays streaked over the silver. The legs and dump pit were painted a dull off-white. Cut the boards for the planked area of the pit and paint them a light weathered-wood gray color. Fashion the pit grating from Special Shapes Co. 1/16"x 1/32" flat bar and paint it a rust color. To add realism, sprinkle the entire pit area with real cement. Construct, paint, and fasten in place the catwalk planking and elevator ladder. Finish the rest of the area with scenic material as you wish. Mount a power pole and string up your power line. You now have a compact industry all connected up and ready to go, just waiting for business and a visit from your railroad's covered hoppers. 



Many modelers lament the lack of their favorite steam locomotives in readily available kit or brass import form. Regretably, not everybody has as yet acquired a taste for the lesser known hogs of both the large and small railroads. Modelers wanting a Great Northern Ten-Wheeler, or a Southern Railway Mikado, or an Erie Decapod can't go out and buy one. The modeler, consequently is left with the choice of buying what is available, which may not always be his exact cup of tea, or of building his own.

Buying what is available and converting it to more nearly suit your needs is the best answer for most modelers. Hundreds of brass locos are or have been available during the past few years, and from this maze of boilers, cabs, mechanisms, tenders, and parts, can be created most of the

locomotives which we seek, in varying degrees of accuracy.

The photos shown on these pages are examples of a few recent cross builds, some more accurately modeled in reference to the prototype than others, but none currently available commercially.

The Chesapeake & Ohio Berkshire is such a simple conversion that it is ideally suited to the beginner, and adds another important loco to any C&O roster. The Southern Railway Ms4 is another relatively simple conversion but somewhat more expen-

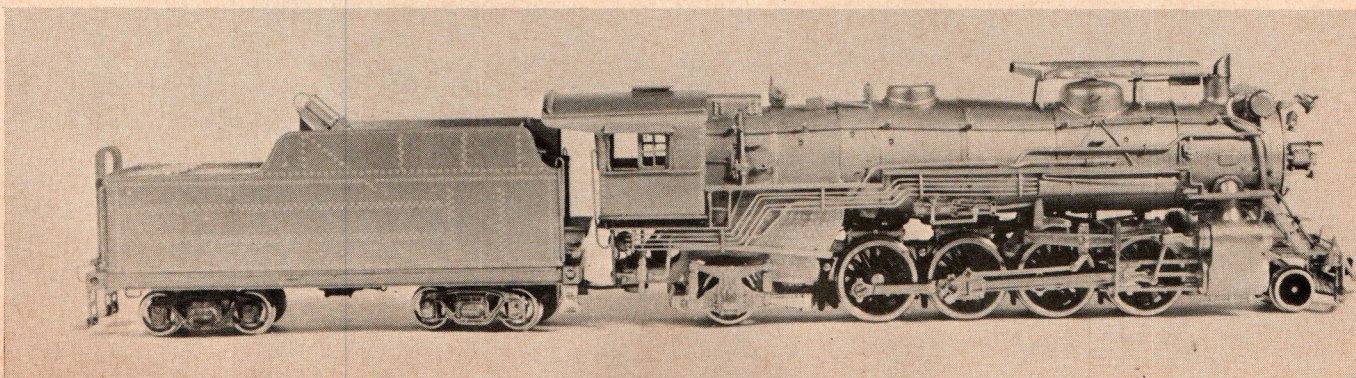
Great Northern 4-6-0 has superstructure, tender, and pilot from Tenshodo GN Consolidation, plus mechanism from a West Side SP T-31. Model created by following photos of the prototype loco.

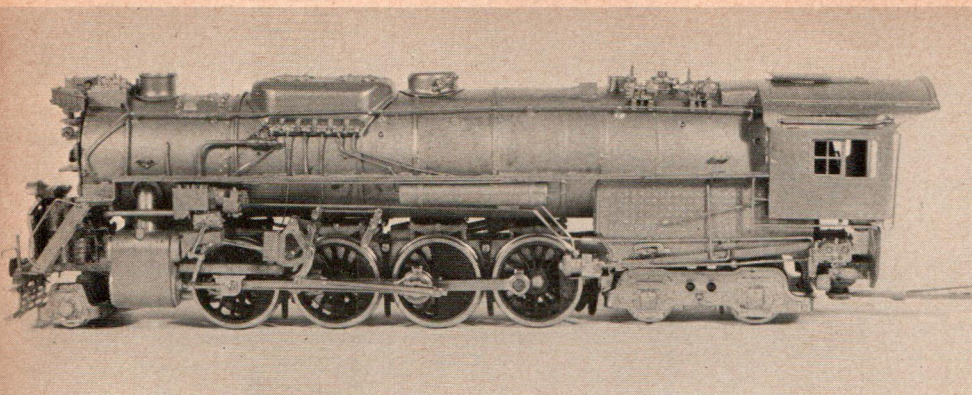
Locos You Can't Buy

by Bill Schopp

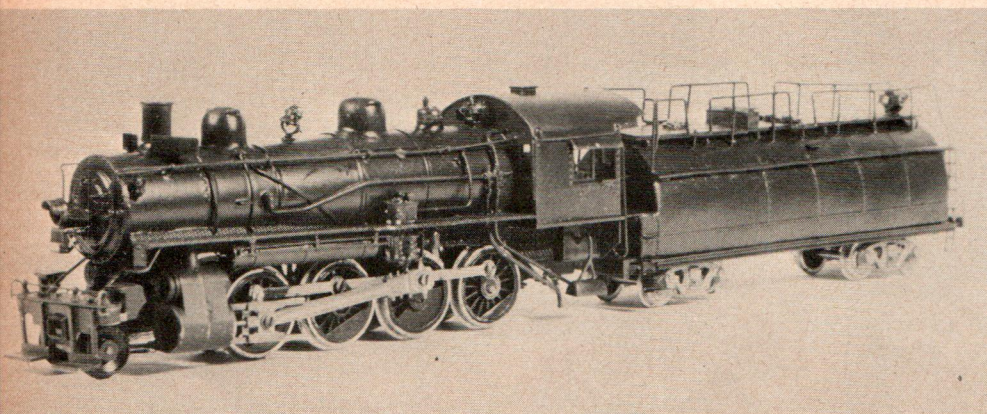
Photos by James E. Albanowski

Southern Railway Ms4 Mikado uses superstructure from United Ps4 on mechanism from United USRA Mikado, with tender from same. Wimble smoke duct was built up from photos on the prototype loco.



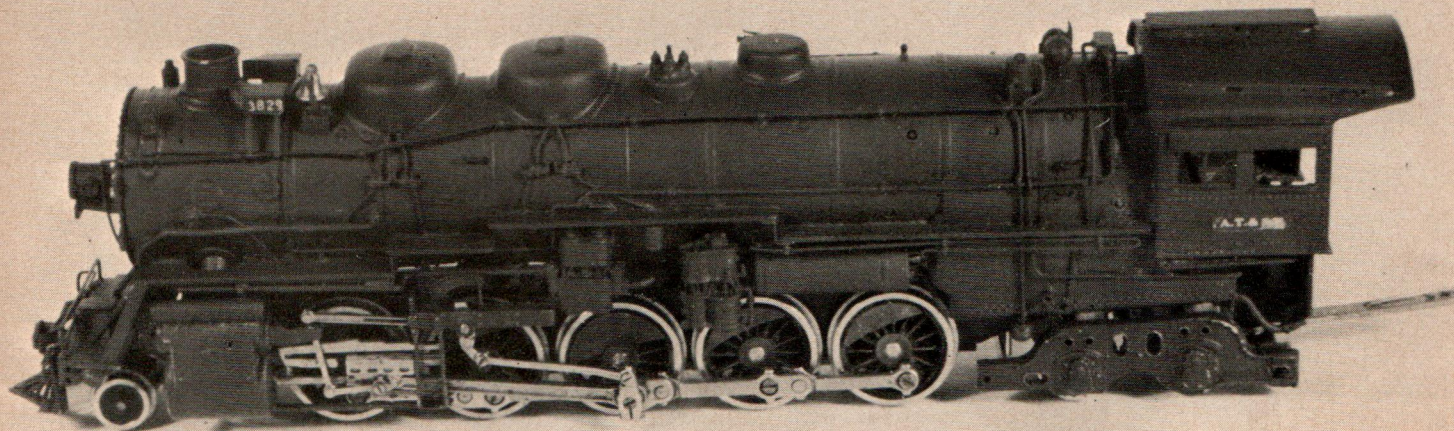


Chesapeake & Ohio 2-8-4 class K-4 is an easy conversion from a PFM Berkshire. Domes have to be unscrewed and positions interchanged. Cal-Scale air pump shield kit 2005 is mounted to pilot deck and headlight lowered, oval number plate attached, and rivets filed off cab to simulate welded unit. NKP tender can be retained but also useful is Gem rectangular 12 wheel C&O tender if available.



Southern Pacific C-9 2-8-0 utilizes superstructure from West Side SP T-31, mechanism from Varney Old Lady, pilot and motor from Paragon SP 0-6-0. Haystack tender was made by opening bottom seam of Gem SP A-5 Vanderbilt tender and inserting new ends.

Santa Fe No. 3829 2-10-4 in 1919 version has United's original sports model cab replaced with square cab from 2-8-0, 4-4-2, or 2-6-2. Trailing truck was replaced with ATSF Berkshire truck with the frame cut to clear. Drifting chambers were soldered to tops of cylinders. Cary FP-129 Elesco older style feedwater pump later replaced more modern version shown just ahead of the airpump.



sive since it requires the purchase of two locomotives. Left over will be a USRA Mikado superstructure and a mechanism from a Southern Ps4 Pacific, which should fit together into a highly usable locomotive.

West Side's T-31 disappears when creating both a Great Northern 4-6-0 and a Southern Pacific C-9, but other component parts are needed to finish both jobs. And so it goes on other locos as well.

For the modeler, the hardest job is often the actual researching, to find the closest possible model to the engine you want for your pike, and then double checking the model to be sure it is as authentic as it should be, and then determining what work needs be done to make the model you want.

The greater the accuracy you will seek, the harder your job will be since the availability of suitable locos for conversion will drop. The skilled modeler will also soon learn in what areas he can fudge a bit, and, more important, those areas where he can't. A locomotive can be a foot too long or too short and few modelers will be the wiser (although a fussy builder will know his model is wrong and it will bug him continuously), but put on the wrong valve gear, or sand dome, or tender, and the entire effect can be ruined.

The job is also made easier by keeping in mind the different families of locomotives, which can be grouped several ways. One, by builder: Alco locos often have distinctive family characteristics, as do locos by Baldwin and other builders. Two, by design: USRA types were much alike from road to road even when from different builders, a fact which the model loco builders have capitalized on. Three, by railroad: Pennsy locos have many common features, as do New York Central hogs, "Harriman" locos, etc.



Dry Transfer Lettering

A combination of rub-on lettering and air-brushed grime combine to give this husky two-truck Shay that delapidated weathered look modelers like.

by Richard Appel

SOME modelers have never tried dry transfer lettering, perhaps thinking they are difficult to apply or present various problems in their application. This is not so. Once you get the knack of using them, they are not difficult.

There are some tricks to their proper use which must be learned if you want this new lettering medium to do the kind of job it is designed to do. Since dry letters are now being packed with certain kits, the techniques involved should be known to all modelers. For example, how would you like to take a mass produced box car and make it look like a scratch-built car turned out by a master modeler? Imagine the difference in a string of cars, first as they look fresh from the shops. And also as they look after they have had their freshness weathered away by industrial fumes, soot, rain, and snow. When weathered, they don't look like toys anymore, and you can get this realism so easily you won't believe it until you give it a try. I spent more than six months experimenting with all the dry transfer decals now on the market, and with various solvents and paints.

Application

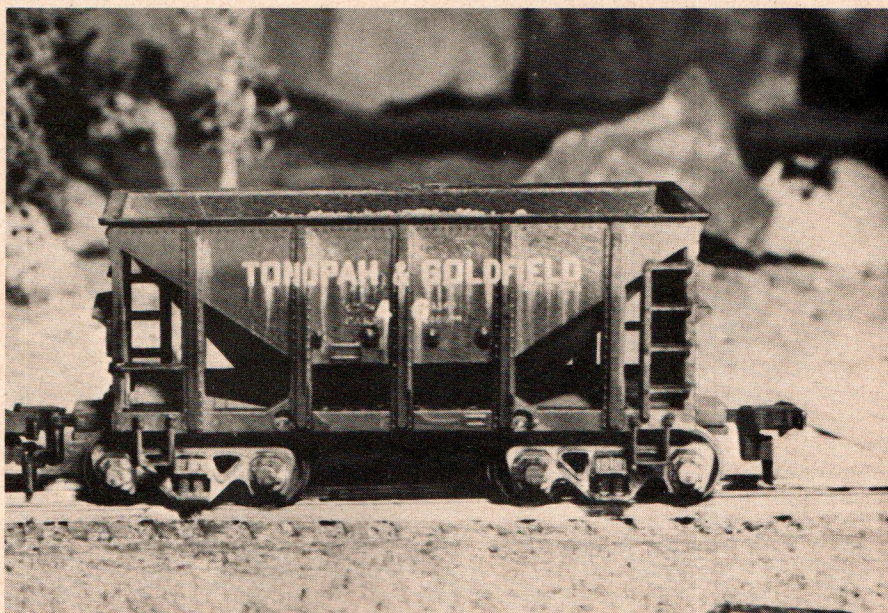
Application of dry transfer lettering is best performed with a soft lead pencil, although some use a paper clip, a ball point pen, or other types of round applicators; try several ways to find the one that suits you best. To transfer dry lettering to a smooth surface, lay the strip of lettering you wish to transfer in correct location

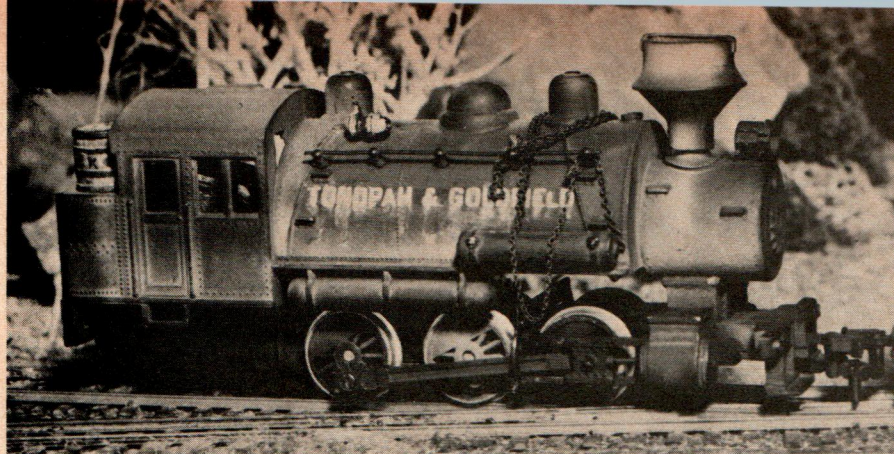
and fasten to surface by making a single line of pressure completely across the strip, then finish by filling in over the complete area of type:

For a model that has outside bracing or cast detail, you must allow for the raised dimensions in order to have the lettering centered as it should be. First cut from sheet the section of lettering to be applied, leaving approximately 1/16" on all sides. Lay in position on model and start application of lettering at the CENTER of strip, working toward opposite ends. The lettering will adhere to the bracing

Dry rub-on lettering lends itself to special weathering jobs and recoloring but does require some care in applying.

Streaked lettering and paint give this ore car a heavily used and battered look, contrasting sharply with cars right out of the paint shop.





The lettering on this MDC Yardhog has been made to streak, as though exposed to excessive sun and rain. Airbrush did the rust work on boiler.

ing if you apply it there. If you do not, cut strip apart at each brace.

When all lettering has been rubbed from the backing paper to the model, gently lift backing off. Special problems may be encountered when using dry transfer lettering on wood. Test a sample first to determine if the backing paper will lift off without pulling the paint away from the wood.

If it pulls the paint away, you will need a releasing agent to separate the transfer sheet from the wood. I had best results with Carter's Rubber Cement Thinner (available at dime stores, stationers, etc.), flowing the solvent directly on the side of the model so that the fluid will pass between the paper sheet and the model. This will release the paper from the lettering and allow you to remove the backing paper without disturbing the paint. I tried it on several wood models with good results but I recommend that you try a sample first, as there are always exceptions to the rule.

Coloring

The white lettering of dry transfer decals can be colored after being applied to the model. I used the Tonopah & Goldfield dry transfer, an extra supplied in the Roundhouse Southern Pacific ore car kit, which has several roads and data in white lettering. I made a thin wash of Ulrich 410M Tuscan Red and Yellow styrene paint and thinner) and brushed it lightly over the lettering, giving it the final touch of authenticity. The paint dries immediately and weathers just as satisfactorily as the plain white lettering.

Weathering

Examination of the letters in dry transfer type decals shows that the ink is suspended in a film of wax. I assumed that the ink would run slightly if the wax could be dissolved or liquified, and that the lettering would then appear to have oxidized and become powdered, and to have run down the sides of the car as it does in the prototype that is exposed to the weather. I experimented with several makes of dry transfer letter-

ing and the various solvents, and found only one kind would dissolve without 'curdling' the ink—this is the type put out by Model Die Casting in several of their Roundhouse Special Car kits and the most all around satisfactory solvent was Ulrich 410M Styrene thinner. Before you try dissolving the lettering that may already be on your car, take a sample of the dry transfer and make sure that the solvent does not make the ink become 'curdled' as there is nothing you can do to fix it if it does this. I used an almost dry brush technique to apply the solvent, removing most of the solvent from my brush on a piece of Kleenex before applying to the lettering. Stroking lightly downward, the 'dry' brush gives a beautifully weathered appearance to the lettering, and will not mar the paint on the car when done with this amount of care. For different types of material—plastic, metal, wood, etc. see chart for particular problem that may be

The photos on these pages show some of the weathered effects obtainable using the dry transfers. The Tonopah & Goldfield 0-6-0 tank engine is a modified Roundhouse Yardhog. The light grayish areas are actually a reddish color. The effect was obtained by mixing a small amount of Ulrich freight car red into thinner and then airbrushing this wash over the areas where the rust effect was desired. A similar technique was performed on the Two-Truck Shay.

The ore car was an undecorated Roundhouse kit. The lettering for this car was part of the dry transfer lettering supplied with the kit. Other road names are also provided in the set. The weathered effect on the car lettering, and on the locomotives, was done by the method described in the test.

Table of Application

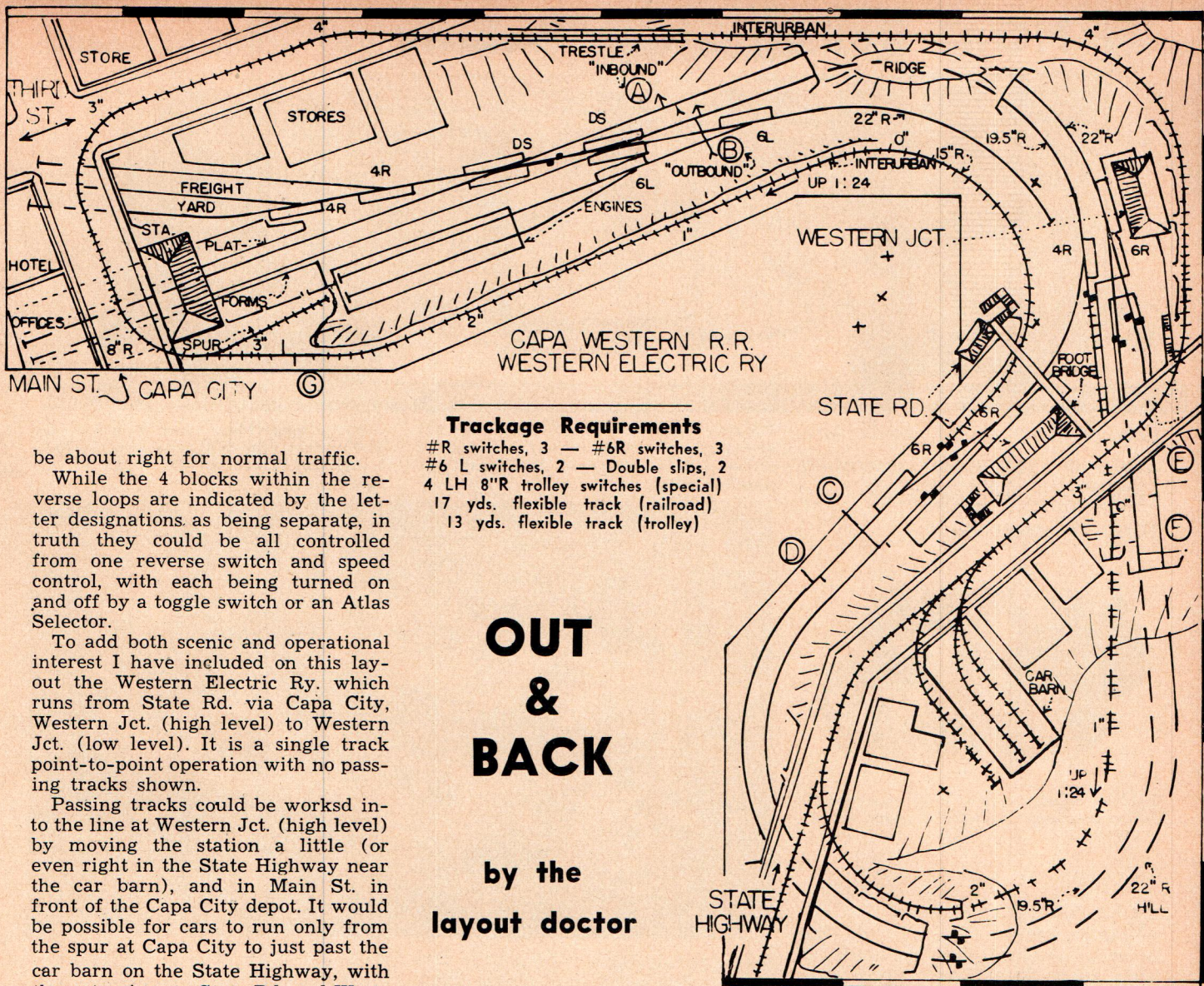
<i>Plastic:</i>	Prepainted. No problem.
<i>Plastic:</i>	Unpainted. No problem if using styrene or acrylic paint.
<i>Metal:</i>	Painted, with primer coat. No problem if lettering is applied at room temperature.
<i>Metal:</i>	Painted, without primer coat. Problem, test sample first as paint may pull off.
<i>Wood:</i>	Prepainted, PROBLEM! Test sample first. Further info. under application.

Out & back operation provides limited mainline running, permitting the operator to concentrate on the making and breaking of trains, and other switching movies in limited space.

THE operation for a small terminal for passenger and freight trains is of interest to many model rails who have no great desire for a long, long trail of trackage a-winding for prolonged running. Here is one version of the out-and-back layout theme worked into a pike which, in HO, is eight by ten feet, L-shaped, (For O scale, double all dimensions; for S gauge, multiply by 1½; for TT, take ¾; and for N gauge, take ½). It provides both railroad and interurban running, and my suggestion is that the railroad be operated with diesel hood units.

The Capa City terminal has only 2 platform tracks, one primarily for inbound trains, one for outbound trains. The inbound platform track will also serve as arrival and make-up track for the short freights that will run, while either track will have to double as yard switching lead. The outbound platform track, will serve, in part, as storage track for coaches that are not in use. I forewent the luxury (and extra complications) of a right-hand escape cross-over between the 2 terminal tracks (between the parts of the word "plat-" and "forms") in order to get longer useful terminal tracks. Now, an inbound train pulls into the terminal, and its engine uncoupled to pull ahead under the office building. A switcher then comes from the yard, takes the cars through the two double slipswitches (acting as a RH crossover), and pushes them either into the yard or into the outbound track. The road engine can then escape to the engine terminal for servicing or go to the front of the outbound train. This can be done with minor variations for either freight or passenger trains.

An outbound train at State Rd. station has the choice of two tracks, each of which is part of a reverse loop which ends around at Western Jct. station. The double tracks of the reverse loop are meant to act as holding tracks, layover tracks, or whatever you want to call them. Note that each track is divided into two control sections, giving you C, D, E, and F blocks. Those should store 4 trains, right? Really most of the time you'll doubtless store only 2 or 3 trains, with one moving out "inbound" shortly after a new one arrives, and all moving up one block if there is space. These blocks are short, thus limiting length of trains to an even greater extent than the length of the terminal tracks—2 or 3 passenger cars, 4 or 5 freight cars, plus loco (and caboose) would



be about right for normal traffic.

While the 4 blocks within the reverse loops are indicated by the letter designations as being separate, in truth they could be all controlled from one reverse switch and speed control, with each being turned on and off by a toggle switch or an Atlas Selector.

To add both scenic and operational interest I have included on this layout the Western Electric Ry. which runs from State Rd. via Capa City, Western Jct. (high level) to Western Jct. (low level). It is a single track point-to-point operation with no passing tracks shown.

Passing tracks could be worked into the line at Western Jct. (high level) by moving the station a little (or even right in the State Highway near the car barn), and in Main St. in front of the Capa City depot. It would be possible for cars to run only from the spur at Capa City to just past the car barn on the State Highway, with the extensions to State Rd. and Western Jct. (low level) stations being thought of as freight interchange tracks. I show no freight sidings on the interurban, so that package freight should be carried by box motor. A siding or two added would require pulling standard railroad freight cars along the interurban with either the box motor or a steeple cab.

Another type of operation that has occurred to me since finishing the drawing would be all-interurban. It could be all overhead wiring, but it might prove more interesting if the part shown interurban was run by overhead wire, as originally intended, but what is now the main-line railroad to be operated by outside third-rail. Then a car or short train of interurbans could leave Capa City (low level) on third rail and change to overhead trolley at Western Jct.

Trackage Requirements
 #R switches, 3 — #6R switches, 3
 #6 L switches, 2 — Double slips, 2
 4 LH 8"R trolley switches (special)
 17 yds. flexible track (railroad)
 13 yds. flexible track (trolley)

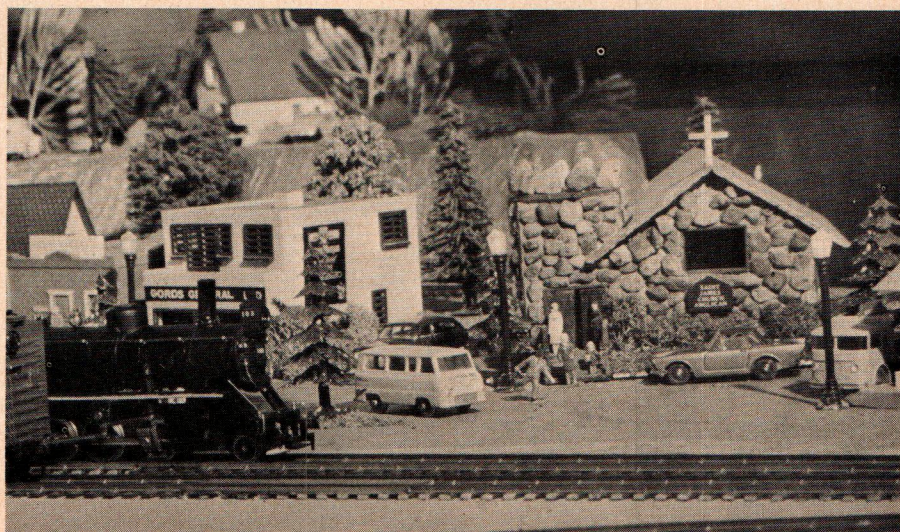
OUT & BACK

by the
layout doctor

(low level). Then it would climb the hill, run along State Highway past the car barn, past Western Jct. (high level), left along the top wall, and through Third and Main Sts. Still on overhead trolley, the car would proceed downhill to State Rd. where a change to third rail would be made

before proceeding around the reverse loop, past Western Jct. (low level) to enter Capa City terminal (low level).

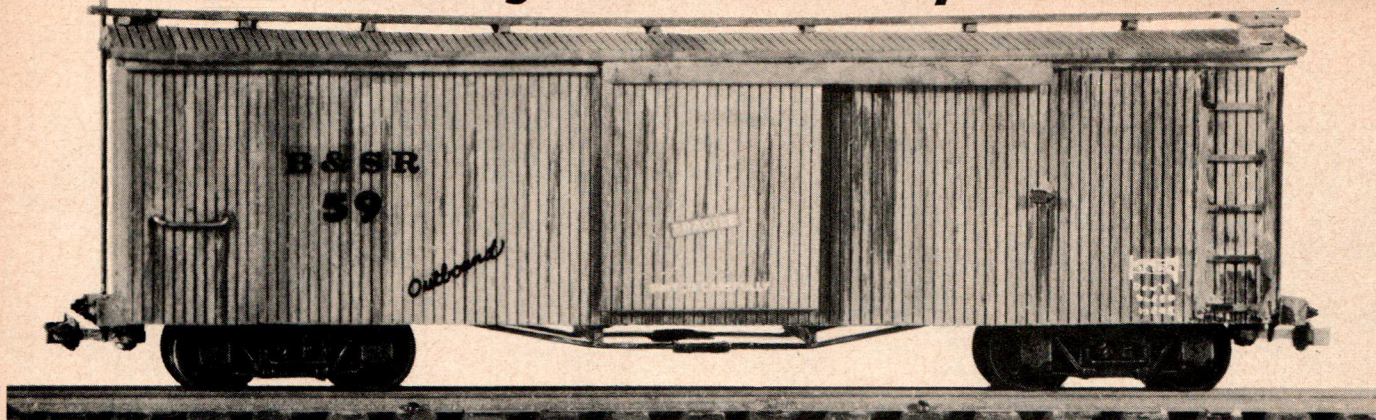
The changeover from third-rail to trolley running could be done manually, but I know from experience that it also can be done by remote control.



K. W. Jay, 5 Golfwood Hgts., Weston, Ontario, built this unusual Anglican Church from balsa covered with pebbles from a Lake Ontario beach. Stained glass windows are transparencies of actual church windows. Pike follows CPR, TH&B.

RAILROAD MODEL CRAFTSMAN

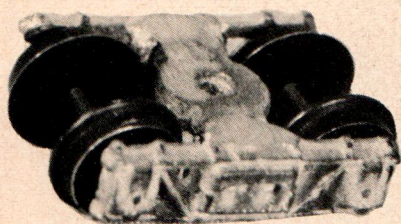
HOn2 Rolling Stock Is Easy by Bruce C. Bowden



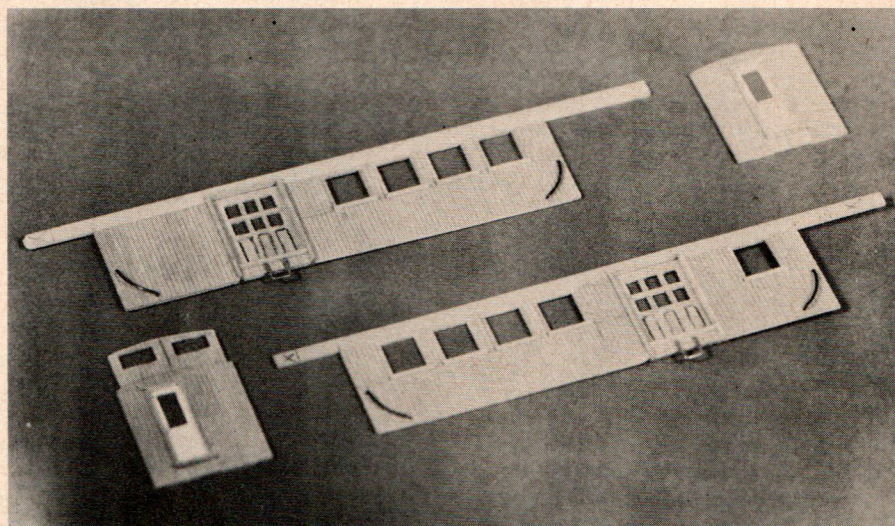
Enough component parts are available to make operating HOn2 layouts a relatively easy thing to scratchbuild.

Bridgton & Saco River HOn2 boxcar was assembled in an easy evening's time, using scribed sheathin, stripwood, and the author's modified trucks.

Caboose sides, below, were built up from Northeastern basswood using plans in RMC Rolling Stock Manual*. Car is an Edaville (SR&RL, hack.



Bowden's HOn2 trucks built up from Gandy Dancer components, with 22" diameter wheels, 4" centers.



SOME YEARS ago when I first became interested in HOn2, the greatest deterrent was the lack of scale parts. I had built up several cars in the late forties using cardboard and cut down HO trucks, but these were grossly over proportioned. A few years ago when the bug caught up with me again I decided to build up and stockpile some trucks as a first course of action.

I experimented with various Kemtron HOn3 wheelsets and several varieties of TT gauge trucks. The Kemtron wheels were too wide, and all the sideframes (even though I could obtain the correct four foot centers) were massive. As a compromise I settled on some TT gauge track components which I purchased in bulk from Gandy Dancer. In getting oxidized brass wheels I avoided the painting problem and having non-shouldered axles the wheelsets were easily regauged. The sideframes (arch bar) and bolsters were soft metal. The latter were cut down to proper width and the whole truck assembly was then set up in a homemade jig for soldering.


Plans and photographs for HOn2 equipment are not as scarce as you might think. Two excellent sources are. Linwood Moody's "The Maine Two Footers," and Crittendon's "The

Maine Scenic Route." John Derr also offers a fine selection of plans. A few plans appear in RMC's "Rolling Stock Manual," (Blue Cover Edition*) and many have been printed in these pages over the years. As far as the Maine roads are concerned, most of the box cars were 26' to 28' in length and a few were 30'. There were flats and gons, and even a few tank cars. These were plain old tanks mounted on flats. Passenger cars were generally about 43' long. The cars were 6' to 6½' wide with the passengers running about 7'. Freights averaged about 9' high and the passengers were a foot higher. Coupler centers were 15" above the rails. Many types of equipment are still rolling in South Carver, Mass., on the Edaville RR.

For box cars I prefer to make them up from scratch, although TT gauge 40' box cars are just about the same size, but about a foot too wide. I use ½" flat stock for the floors, and 1/32" scribed sheathing for the sides, ends, roof and doors, to make my own. TT gauge roofwalk material and brakewheels are just the right size. Some flat brass ladder stock, a few grabirons, and some wire for the truss rods finish up the trim details. For couplers I use a dummy knuckle by

Kemtron: X-329. This is the closest to scale I have found. The cars are very light and the weight is where you want it—in the trucks. The main reason for the light weight has to do with the motive power. The design of the prototype engines (Forney's were the most popular) does not permit concentrating much weight over the drivers.

You'll find you can crank these little cars out by the proverbial car load once you get into it. Materials go a long way and for the most part I use scrap left over from full size cars. Passenger cars and the caboose pictured here under construction are another story. Because of the roof detail, windows, and end platforms, they are infinitely more time consuming. Now and then every modeler needs a good challenge. The caboose has full interior detail and is lettered for the Edaville. I have a particular fondness for this little cab having ridden many miles around the Edaville in it.

The AHM HOn2½ cars can be modified easily for the two foot gauge although their usage on a pike would be limited to industrial purposes. Not out of place would be a string of tilt hoppers brought up behind the track repair crews.  * Now out of print.

Model Craftsman Publishing Corporation announces the first volume in a distinguished new series of fine railroad books.

LOCO 1

THE DIESEL

A survey of internal combustion locomotives from 1900 through 1966.

LOCO 1 will sell for \$8.95 after its November 1, 1966 publication date. All orders received prior to the November 1, 1966 date will be honored at the special pre-publication price of \$7.95, when accompanied by remittance in full. Hobby dealers and book stores order direct from the publisher through Dealer Service in any quantity. LOCO 1 is a survey of the development of the gasoline and diesel locomotive, starting about 1900 when the railroads began to feel the need for lighter weight, more economical equipment than was then provided by the steam locomotive.

LOCO 1 traces the history of the internal combustion locomotive and railcar from the early days of home-built through the latest in railcars and 5000 hp. locomotives. Here are Mack rail buses of 1922 and 1955, flanged Model A Fords, early McKeen cars, and gas-electrics from Svkes, Brill, EMC, GE, and other builders.

LOCO 1 covers the important stages of Electro-Motive locomotive development, from early boxcab switchers, to the GP18, GP-35, SDP-35, FL-9, and SD-45.

LOCO 1 also covers the important designs of Baldwin, Lima-Hamilton, Fairbanks-Morse, General Electric, Alco, and such other producers as Plymouth, Montreal, Canadian Locomotive, and others. As a companion to other cyclopedias and plan books, or by itself; LOCO 1 will be a most valuable reference in the library of every railfan and model builder.

the Big C puts



back the fun in
model railroading



LOCO 1 has already been acclaimed by leading railfans and model railroaders as filling a definite need for authoritative library editions. In its horizontally bound pages requiring expensive hand operations, the diesel locomotive is displayed at its best in text, drawing, and photo.

LOCO 1 is beautifully bound in simulated leatherette, gold stamped. Printed on heavy 80 pound coated paper, the large 11x8 page size permits reproduction of all drawings to the same scale, 3.5mm. per foot (HO) except for some units shown full size O scale. Handsome printed end papers and dust jacket enhance the overall appearance. The volume is designed to fit most library shelves.

Pre-Publication Price \$7.95

Price will be \$8.95 effective November 1, 1966.

MODEL CRAFTSMAN PUBLISHING CORP.
P. O. Drawer C
Ramsey, New Jersey 07446

4086

Please send me a copy of LOCO 1 as soon as it becomes available. I enclose \$7.95 in check or money order for each copy ordered at your special pre-publication price. I understand that the price after Oct. 31, 1966, will be \$8.95.

NAME

STREET

CITY STATE ZIP

Please print or type legibly. New Jersey residents add 3% sales tax.

EXCHANGE PLACE

EXCHANGE and PASS listings are open to all readers. No "For Sale" or commercial listings accepted here (Classified Ads are 20c per word elsewhere in this magazine). We reserve right to edit any listing or reject any listings which are in our opinion commercial in nature. Limit, one listing every three issues. RMC cannot assume any responsibility for differences occurring between parties to an exchange. Listings cannot be repeated. Violations of standard ethics will be considered violations of postal laws and dealt with as such. Use your full real name. Sorry, no dealers. Print or type legibly. Allow 6-8 weeks for publication. Sample pass must accompany request for pass listings. No objectionable passes listed.

Send all Exchange listings to: Exchange Place, Railroad Model Craftsman, P. O. Drawer C, Ramsey, New Jersey 07446.

WANT: Yellow & brown vestibule (complete) for 752 E. W. J. Dennhardt, 1301 N. Alabama, Indianapolis, Ind. 46202

WANT: Toy Trains Mag. Nov. 1951, June and Winter 1954 issues. A. F. S. ga. cat. 1945 & 1947 issues. "Ships and Aircraft of US Fleet", "Man Who Lived in Paradise", "Life of A. C. Gilbert". F. L. Wey, 1519-17 Woodley Ave., Terre Haute, Ind. 47804.

HAVE: Testrite enlarger, other darkroom equip., pass. timetables. WANT: ATSF, SP, Brass eng. HO. Also MDC 0-6-0 kit. SAE appreciated. John Hodson, Britt, Iowa 50423

WANT: PFM 2-6-2 Prairie King, 4-6-0 V&T and Rivarossi "Hiawatha" contest J. G. Peine, 2927 Jefferson Ave., Davenport, Iowa 52803

HAVE: Tenshodo U.P. 4-6-6-4; Austin U.P. early 4-6-6-4; Tenshodo USTA 0-8-0. WANT: Tenshodo ATSF 2-10-4; United ATSF 2-8-4; United ATSF 2-8-0. LeRoy Berglund, 403 E. 13th, Larned, Kansas 67550

WANT: RMC, first issue thru 1945, Flying Revue Internatl. All before 66. Most RR Mags. Sperry Rail Car Sides O ga. E. E. Almond, 624 Nelson Pl. Newport, Ky.

HAVE: Tenshodo S.F. FT pass. SD9 PRR & S.P., GP7, NYC, ATSF, unpntd. FT & GP7: Blue Line & Amer. Beauty 85' I.C. & S.P. WANT: GN Good brass steam. Your list for mine. D. R. Berry, 3223 Roman St., Metairie, La. 70001

WANT: Lionel 752 loco for City of Portland any cond.; HO Rivarossi Hiawatha and PSM HO FM Rd. switcher w/wo pwr. trucks, T. Speidel, 5 MacIntosh Rd., Bedford, Mass. 01730.

HAVE: HO equip. or cash. WANT: HO Marklin &/or TT Rokal items. My list for yours. P. J. Sabbey, 29 Highland Ave., Cambridge, Mass. 02139

HAVE: Lionel std. ga. eng. #10 cars #332-2, 339-2, #341-1; track, s.w.s. Also 250W ZW Trainmaster. WANT: Lionel O ga. eng. #773, not the new one, or Rio Grande, C. S. Weiler, 83 Parkview Ave., Stoughton, Mass. 02072

HAVE: 2 Cross-kit 4-6-2's & Cross-kit 2-6-2. WANT: Varney Heavy 2-8-0 w/tender. Kit or blt. up. N. F. Schaberg, 15720 Minock, Detroit, Mich. 48223.

WANT: Historical RR Memorabilia. State your wants. Alden Miller, 3212 34th Ave., So., Minneapolis, Minn. 55406

WANT: Tenshodo GP or SD units. State price & cond. All letters ans. Ronald Exch, 461 Goodhue St., St. Paul, Minn. 55102

WANT: Modelmaster HO trackspikes, Hobbytown multitrack & mechanisms. All letters ans. Richard Provanco, 7220 Gen. Sherman Lane, Affton, Mo. 63123

HAVE: Aristo 2-8-2, Ambroid Poultry Car kit. WANT: Diesels or pass. equip. Rev. Walter Smith, Box 224, Hillsboro, N.H. 03244

HAVE: AF "S" ga. steam eng. WANT: P.L. T-1, 1-1, H9, L-1 or brass Camelbacks, AHM std. pass. cars. Joe Burkel, 133 Lehigh Ave., Blackwood, N.J. 08012

HAVE: Max Gray ATSF 4-6-2, Takara/Gem SP Mogul, Brass C&NW 4-4-2, Penn Line 4-4-2 & 2-8-0, frt. cars & kits. WANT: Other frt. & pass. car kits, ATSF Mike, UP 2-8-0. SAE, R. J. Flanigan, 417 Fifth Ave., Belmar, N. J. 07719

WANT: Used Lionel 0-4-0, Lionel or Marx 2-4-2's, any cond.; reversing unit, any type, good cond. John Benyo, 25 Schley St., Garfield, N. J. 07026

HAVE: Left, right, Wye turnouts; 18" snap-track, 22" also; Atlas turntable w/motor. WANT: #6 s.w.s., left w/motors. Kevin Brady, 16 Blue Ridge Ave., Green Brook, N. J. 08813

HAVE: HO. WANT: Athearn SD-45, Demonstrator, Blue/White, exc. cond. Advise your needs. Stan Borkowski, 198 Dutch Neck Rd., Hightstown, N. J.

WANT: Lionel cat. 1920 to 1939. Frank Sobolewski, 322 S. Allen St., Albany, N. Y. 12208

HAVE: Kodak Verifax copy machine w/supplies. WANT: Lionel Hudson #700E. K. Voss 122 Wentworth Ave., Albertson, L. I., N. Y.

WANT: Mantua locos, or parts. Belle, Mogul, Bee, Goat, w or w/o motors. Also parts to brass caboose 4 & 8 wh. Back issues of H.O.M. Fred Bachand, RD 2, Johnsonville, N. Y. 12094

WANT: Alex. O ga. Budd alum. body extrusions; body & truck castings for same. Robert Wagner, 333 E. 34th St., New York, N. Y. 10016

HAVE: Varney 2-8-4 kit, MDC 4-4-2, Bowser Mtn. Brass Boiler & S/B front. WANT: MDC 2-6-2, Bowser 4-6-2, Vanderbilt coal tender or . . . D. Ingberman, 326 Chesterton Ave., Staten Island, N. Y. 10306

WANT: Penn. Scale Models Fairbanks-Morse Baby Trainmaster HO scale. Advise price & cond. Henry Statowski, 333 Calhoun Ave., Throg's Neck, N. Y. 10465

HAVE: Lionel 027 steam frt. train set, track, s.w.s., acc. WANT: HO rolling stock kits, structure kits, lineside scenery items, motor vehicles. Russ Christensen, 76 Yarmouth Rd., Rochester, N. Y. 14610

WANT: 8 lb. & 12 lb. used park size RR rails, any quantity. Also pix of park size trains, Varney Streamline 4-6-4. Leslie Tuttle, Box 191, Rural Hall, N. C.

HAVE: Lionel O ga. #2020 Pennsy 6-8-6 steam turbine w/tender. WANT: HO dbl. truck trolley or interurban car. R. Leitch, 18707 Ferncliffe Ave., Cleveland, Ohio 44135

HAVE: Lionel repair parts, frt. cars, acc. (period 1946-1956). WANT: Used Lionel pass. cars, diesel locos & magnatraction steam locos only. John Bayne, 4 Iona Ave., Narberth, Pa.

HAVE: Amer. Flyer 4-4-2 loco w/tender, 4 cars, exc. cond. WANT: Athearn 4-6-2 loco & tender kit. Thomas Barger, 8715 Patton Rd., Philadelphia, Pa. 19118

WANT: Varney Casey Jones loco, plus others. HAVE: Old Lady, Varney kit. M. R. Seidel, 519 N. 8th St., Reading, Pa.

HAVE: United USRA 2-8-2, Bowser 4-6-2, 4-6-6-4, Penn Line-Cary 2-8-2, AHM cab-fwd. 0-8-0, Krauss-Maffei & 2-8-4, many others. WANT: Hobbytown GP-30 chassis. Harlan Lane, Rte. 2, Gravely Rd., Kingsport, Tenn. 37660

HAVE: 2 Ives 6 1/2" frt. cars, S & O stuff. WANT: #11 Ives tender, Lionel 626, 627, 628, 629 G. E. eng. or trains. John Graef, 7304 Turtle Creek, Dallas, Texas 75225

HAVE: Trains Mag. 1950-65, RR books, misc. prewar Lionel, HO ga. Marklin. WANT: Lionel std. ga. 385E loco or parts, info., Egger-Bahn or ATSF HO. G. C. Bassett, 3204 Tyrone Rd., El Paso, Texas 79925

WANT: O ga. M. G. cab-fwd. S. P. AC-4 or later. Swap any items on my list plus cash. or other M.G., Lobaugh locos or cars. D. S. Jenkins, Rte. 1, Box 155, Kerrville, Texas 78028

HAVE: OO Scalecraft Diner Kit, Strombecker box car kits, Old Varney kit. WANT: HO#3. SAE. Robert Harmen, CMR #8 Box 369427 Lackland AFB, Texas 78236

WANT: RMC—Mar., Apr., Sept. 1954, July, Aug., Sept. 1957, Mar., May 1963; MR—May 1954, June 1957, Mar., May 1962. Will pay 50c for exc. cond. Richard MacNary, 621 W. Cook Rd., Mansfield, Ohio.

WANT: Tenshodo F-7 or SD-9. HAVE: Tenshodo F-9. H. Maywald, P.O. Box 272, Bellmore, N. Y. 11710

HAVE: Model Tramways System cars LVT 900s & 410s, Suydam BA&P, Baker Power Trucks, Penn Line Decapod & GG1, Akane B&O EM-1 many others. WANT: Traction equip. Peter Oppman, 106 Bronxville Rd., Bronxville, N. Y. 10708

HAVE: MR, RMC, MT, Cat., Annuals, etc. 1942-present. WANT: HO. Stamp for list. Fred Gersh, 202 S. 2nd St., Brooklyn 11, N.Y.

HAVE: Athearn Hustler, exc. cond. WANT: AHM #6452 N.Y.C. Rwy. P. O. car. Vincent Reiner, 132-35 Sanford Ave., Flushing, N.Y. 11355

HAVE: Tyco 189 10-wheeler, lighted. WANT: 0-6-0 switcher w/ slope back tender, or other HO eng. R. M. Downs, 172 N. Broad St., Johnson City, N. Y. 13790

WANT: Pay top dollar for Max Gray wrecking crane O ga. Describe & state price. Harold Titus, 625 Miami St., Marion Ohio 43302

WANT to buy refinished & rebilt. loco & tender #400, 392, 390, 384. Robert Nyerges, 20800 Lake Rd., Rocky River, Ohio 44116

HAVE: PFM CP 2-8-0 unpntd., exc. cond. WANT: Walther PP, PPK, P-38 or what have you? W. J. Crosby, 1936 Fernwood, Toledo Ohio.

WANT: Prewar Lionel U.P. Streamliner. Also postwar Lionel service tool ST-311 wheel puller. State price & cond. Milton Silver, 2231 N. W. 43rd, Oklahoma City, Okla.

HAVE: SP AC9 (Akane—not Summer Special). WANT: United K28 & Balboa K 36 or other D&RGW HO#3 Mikes or Consol. William Dippert, 2433 S. E. Grant St., Portland, Ore. 97214

HAVE: Tyco HO Pennsy switcher 0-4-0 & 3 cars plus Pennsy caboose. WANT: Lionel #164 log loader or Lionel Steam Loco w/ whistle tender. Lindy Staller, 920-9th Ave., Brackenridge, Pa. 15014

HAVE: Common std. ga. cars 100 & 500 ser. frt., 332 ser. pass. cars. Also #10 eng. WANT: 516 hopper. SAE for list. R. C. Wunderlich, 1305 Woodbine Ave., Bristol, Pa. 19007

HAVE: Model airplanes, wood kits & ready-to-fly, motors, acc., etc. WANT: Std. O. 027, HO trains, any cond. Harry Henning, Jr., P.O. Box 13, Kulpville, Pa. 19443

HAVE: Model Builder, HO Monthly & MT. WANT: PFM geared locos, Athearn 4-6-2 & AHM BL-2. State cond. Major Bruce Bowden, 307 Mitchell Blvd., Lubbock, Texas 79415

HAVE: Lionel Pennsy Gond. #2462 Shoe uncplrs. WANT: A. F. #24222 covered hopper & any Junkers for parts. Ken Secrest, Rte. 1, Box 1230, Issaquah, Wash. 98027

WANT: A. F. S. ga. locos, #353 Circus, #342DC, #285, exc. cond. #354, 356 Silver Bullet, mint cond. A. F. cat., adv. signs, serv. man, Robert Estes, 17210-34th Ave. So., Seattle, Wash. 98188

HAVE: Locos, cars, parts. Your list for mine. WANT: A. F. S. Ga. 320; 324 AC, 353 Circus, 313, 21145, locos, any diesels. Dan Olson 16150-41st Ave., N. E., Seattle, Wash.

WANT: Complete set superstructure & end casting for HO GE U25B (RMC 11/62). State price & cond. Morton Munson, 627 Grant, Shelton, Wash. 68584

HAVE: Aristo Craft 4-8-2, 2-8-2, 4-4-2, 4-6-0, 4-6-0 Camelback, Old Lady, Athearn diesels, pass. & frt. cars. WANT: United V&T 4-6-0, Varney Big Consol. Mario James, 3545-21st Ave., Kenosha, Wis. 53140

WANTS to buy L & RHS Bulletin #83, CN Number Plate, HO Ga. Grant pass. cars in old CNR colors. Robert Baker, 20 Melfa Ave. CFB Petawawa, Ont., Can.

HAVE: RMC 1951-1965; MEW 44 ton Switcher. WANT: On3 & 1943 Trains Jan-Oct. SAE for list. Harold Midwood, 30 Sharpe St., Scarborough, Ont., Can.

WANT: Tenshodo CN pass. cars Canadian Natl. green & black, streamlined, any type except Obs., kit form or r-t-r. David Gardave 301 Lytton, Blvd., Toronto 12, Can.

WANT: Revell 1961 HO Chrysler Corp. autos, Mercury (US) Chevrolet '64 metal pick-up truck. State price & cond. Jen-Jorgen Juel Pedersen, 2 Egemosen, Skodsborg Denmark.

WANT: Old toy trains, trolleys, train cat. Frame for 349E or 249. Also HO eng., pass. cars; LaBelle or Binkley old time pass. cars & eng. Colonel Carter, Rt. 5, Box 2, Mobile, Ala.

HAVE: Tenshodo GN 4-8-4, 2-8-2; Tenshodo GN caboose; LMB T&P 2-10-4. WANT: AHM ATSF 2-8-8-2, std. pass. cars; Balboa ATSF 4-8-2, 2-6-2, etc. Conrad Pickren, 304 W. Coosa St., Sylacauga, Ala. 35150.

HAVE: Athearn SDP-40 (SF), F-7A Hi-F (SF); Revell F-7 gear drive chassis. WANT: MDC 0-6-0; Hobbytown Alco rd. switcher; Kadee &/or MEW log cars. Jerry McCrory, P. O. Box 335, Hot Springs, Ark. 71901.

WANT: Lionel 6464 box cars, espec. WP-1 Red letters, Black letters; MStL-50 Green; WP-100 Orange w/White Feather; DRG-650 Yellow Roof; 203 switcher, others. Richard Meely, Box 638, Bijou, Calif. 95705.

HAVE: Marx 3-rail O ga. 2-4-2 w/SP tender & pwrpk, rolling stock. WANT: Tyco GP 20 AT&SF. Richard Gunter, Jr., 8961 Plaza Park Dr., Elk Grove, Calif. 95624.

HAVE: 1947 Brass Varney 10-whlr. O ga. KD2 motor. Very good. WANT: HO Western Brass. H. Conklin, 2018 N. Highland Ave. Apt. 10, Hollywood, Calif. 90028.

HAVE: TT Flex Track—159' Wrenn, Gem, Wrenn s.w.s., wood rdbd., etc. WANT: HO n3 locos, HO LaBelle or Ambroid. Also have Prowar Mantua metal pass. bodies. Herb Smith, 1116 Walnut, Inglewood, Calif. 90301.

HAVE: Marnold R-50 Rheostats, Tenshodo DPDT s.w.s., Hobbyline Plastic Berkshire kits, exc. cond. WANT: PFM United HO n3 D&RGW Brass Coach, Caboose, or other HO n3. Gary Wilson, 1800 Wilma Pl., Long Beach, Calif. 90810.

WANT: Colored pix, slides, drawings, info. to help determine exact shades of blue AT&SF 3460 was pntd. Robert Semichy, 246 Garden Hill Dr., Los Gatos, Calif. 95030.

WANT: Lionel 0-6-0 switchers—6557 caboose —0-72 track 2426 w/tenders. 2530 ser. pass. cars. 2354 NYC diesels A&B units. George Copeland, 821 N. Grove, Ontario, Calif.

HAVE: Surplus to swap. WANT: Any Marklin frt. & pass. cars & locos 3031, TT800, 3051, 3038, 3066, 3067; HAG AC locos & railcars; catenary; British HO-00, etc. Victor West, 3256 Amhurst Dr., Riverside, Calif. 92505.

WANT: On3 eng., equip.; 0 ga. eng., equip. Gordon Calahan, 5370 E. Asbury Ave., Denver, Colo. 80222.

HAVE: Official Guides, frt. equip, reg. '61-'66; New Haven, Central Vt., Boston & Maine Employee TTs, 50's, 60's. HO kits. WANT: steam locos, bht. up in HO. RR Tourist Guides. Allen Sharp, 100 Shennecossett Pkwy., Gorton, Conn. 06340.

HAVE: United Pennsy 2-8-2, unpntd; Santa Fe 2-8-0; Tenshodo USRA 0-8-0; Balboa SP 2-8-2 unpntd. WANT: United Pennsy 4-6-2; NYC Niagara 4-8-4; Gem L&N 2-8-4 Berk., etc. Charles Burgmuler, 122 S. Shelley Dr., Claymont, Del. 19703.

HAVE: Atlas Brass Rail, Flex & Snap Track, Turnouts, Cork rdbd., Tru-Scale N. S. Wye. WANT: Back copies RMC, MR, Trains, HO n3 or what have you? Charlie Weaver, RD #1 Box #30 Magnolia, Del. 19962.

WANT: Main frame for Rivarossi, S.P. 4-4-2. 2 frames for Hobbyline F-M diesel switcher. Walter Spence, 27 S.W. 4th Ave., Hallandale, Fla. 33009.

WANT: "Century of Southern Pacific Steam Locomotives" by Guy Dunscomb. Top dollar for A-1 copy. William Kuechler, 6100 103rd St., Lot 103, Jacksonville, Fla. 32210.

HAVE: List of O & std. ga. for SAE. WANT: Lionel 8976, 763E Gray, 250E & cars, 792 793, 794, 256, 4, 156, 156X, 2624, 715, 753, 783, trolleys, cat. Tom Johnson, 815 E. Olive St., Arlington Heights, Ill. 60004.

WANT: Lionel 700 Hudson. HAVE: Special model Aero eng. 1" bore & 1" stroke, w/magneto, throttle, spark advance, tappets, etc. C. Kowal, 6615 S. Bell Ave., Chicago, Ill. 60636.

HAVE: MTS Electroliner, Athearn RDC plastic motors, RDC trailers, Walther's Pug cars, Atlas brass snap-track. WANT: Ken Kidder 57' HO Rapid Transit cars. Joseph Reuter, 1819 N. Mason Ave., Chicago, Ill. 60639.

WANT: Lionel & A. F. std. ga. trains & cast iron toys. Hamilton Stern 221 N. LaSalle St., Chicago, Ill. 60601.

HAVE: Akane USRA 2-6-6-2 unpntd. Also HO n3 trucks for United 2 truck Shay. WANT: United Shay or Climax CM 2-8-0, 4-6-0; or 0-6-0 by MEW West Side Heisler. Bill Martinsen, 1407 Carroll Ave., Ames, Iowa 50010.

HAVE: Extensive old Lionel O or 027 equip. All kinds. WANT: Scale locos, diesels (not Lionel) for 3 rail op. AC-DC motors. SAE or my list for yours. J. J. Jecmenek, 158-15 Ave. SW, Cedar Rapids, Iowa 52404.

RAILROAD MODEL CRAFTSMAN

HAVE: English 4-6-2, running cond. Also RR calendars. WANT: Any ATSF or C & S. Brass locos. Any cond., all parts must be there. Some junkers acceptable. All letters ans. John Hodson, Britt, Iowa 50423.

HAVE: Back issues MR, Model Trains. WANT: Good clean unused #70 Brass rail. Avery Norlin, McCracken Kansas 67556.

HAVE: PFM UP 2-8-0; RI 0-8-0; Sierra; Brass Bowser M-1; Baldwin 1000hp; Alco 1600 A&B, others. WANT: Gem H-10; PFM SW-7; brass frt. cars. Lyman Ackerman, 7012 Ithaca, Metairie, La. 70003.

HAVE: HO sets, also Lionel equip., acc., etc. WANT: Lionel locos, cars or what have you. List for stamp. W. G. Freeberger, 1208 Dulaney Valley Rd., Baltimore, Md. 21204.

HAVE: 3464-159000 Box, 6462 black, 638-2361 Van Camp Box. WANT: 6352 refrigerator car. Bill Lucas, 11512 Deborah Dr., Potomac, Md. 20854.

HAVE: Builder's plate from Washington, D.C. streetcar, PCC type. WANT: Any steam or traction builder's plate of equal value. John Hilton, 4010 Highview Dr., Silver Spring, Md. 20906.

WANT: A. F. HO New Haven type pass. cars. Will pay cash or swap from my list. Brian Cudahy, 38 Webster Dr., Holliston, Mass. 01746.

HAVE: Aurora roadrace equip. Car, pwrpk., straight & curve track, HO. Fair cond. WANT: Any HO RR equip. Trade lists: David Albro, 33 Redford Dr., Northampton, Mass. 01060.

WANT: HO John English Baldwin diesel switcher. State price & cond. first letter. Will buy. Don De Forge, 86 Walnut St., Quincy, Mass. 02171.

HAVE: Lionel O ga. items. SAE. WANT: 6400, 2500 and AMT cars suitable for painting. Also #58, 59; #752 Coach; Gargraves s.w.s. Peter Baird, 221 Wilson Ave., Wollaston, Mass. 02170.

HAVE: Tenshodo GP-20 S.P., exc. cond. WANT: Tenshodo GP-9 or GP-7. State cond. first letter. Send for list of other HO items. Erwin Hughes, 63 Indian Hill Rd., Worcester, Mass. 01606.

HAVE: HO diesels, GP 20, GP 30, F 7. WANT: HO Interurbans or City cars. Your list for mine. A. H. Lieder, 1206 Hawthorn Rd., Grosse Pointe, Mich. 48236.

HAVE: AHM Genoa, exc. cond. Walther's Gas Elect. kit, pwrk., misc. cars. All HO. WANT: Small SP HO locos, HO n3 rolling stock & trackage. SAE. H. Phillips, 20643 Maple Lane, Grosse Pointe, Mich. 48236.

HAVE: Locos, PFM, Balboa, Gem, Max Gray, LMB, other items. WANT: O scale Max Gray U.P. 4-8-4, #246 Reefer, #401, 402 Gonds., #911 caboose, Athearn metal kits. SAE. John Addis, 1573 Pruitt Dr., Highland, Mich. 48031.

HAVE: O ga. Trolley layout, benchwork, track overhead. WANT: Backyard 12" to 18" RR rolling stock & equip. Hal Nyberg, 2807 Brookside Blvd., Jackson, Mich. 49203.

HAVE: Pre-1930 O ga. A.F., Ives Locos; A.F., Ives, Bing Cars. WANT: Marx "Wm. Crooks" train; A.F. "Oriental Ltd." Train. W. F. Becker, #715, 469 Ada St., St. Paul, Minn. 55107.

HAVE: Akane B&O 4-6-2 P-7 Pacific. WANT: Tyco RTR 2-6-2 Prairie and Alco 430 diesel in G.B.&W. Rd. name only. Donald Rice, 227 E. 10th St., Winona, Minn. 55987.

WANT: A. F. S ga. GP-7, GP-9 or SD-9, any rd. name, w or w/o motor, any cond. Junkers welcome, also pen pals interested in RRs. Info. & lit. about CB&Q RR. Randy Johnson, 705 Madison St., Canton, Mo. 63435.

WANT: Virginia & Truckee pix of eng., etc. Will buy or trade. Mike Student, 1798 Hillboro, Reno, Nev. 89502.

HAVE: Marx O ga. Hudson streamline pass.; 4-whl. loco, tender, frt. cars; track, man. s.w.s., acc. AF S ga cars, track acc. WANT: S ga. scale items. SAE for list. Eugene Fletcher, 45 Riverside Ave., Hudson, N. H. 03051.

WANT: PFM Crown N.P. 2-8-8-4, unpntd., mint cond. Arnold Cole, c/o F.A.A. Northeastern Blvd. & Harris Rd., Nashua, N. H. 03060.

HAVE: HO Brass locos & kits. WANT: O scale locos & kits of equal value. Albert Koehler, 146 Hickson Dr., New Providence, N. J.

HAVE: Max Gray Water Column, Sanding Tower, Scale O ga. cars, Nickel—Silver s.w.s. WANT: Lionel std. ga. eng. #9E. W. Grimm, 204 Gregory Ave., West Orange, N. J.

On2 Maine Arch Bar Truck \$3.95 pair

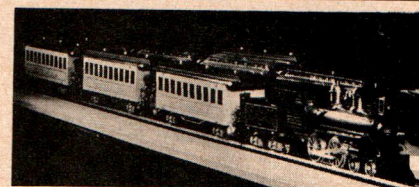
SCALE RAILWAY EQUIPMENT COMPANY
P. O. BOX 5242 NAGEL STATION
ST. LOUIS, MISSOURI 63115

Gargraves NEW PHANTOM LINE TRACK

3 ft. flexible track to mate with O, O-27, O-72 & S gauge. Manual switches, power units and switch machines available.

Send 5c stamp for Gargraves Trackage Facts

GARDNER, The Train Doctor
2261 Dewey Ave., Rochester, N.Y.

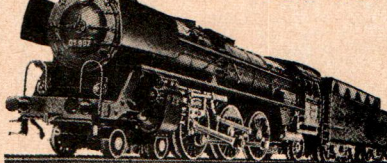


STANDARD (2 1/8") GAUGE TOY TRAINS
ONE OF ONE THOUSAND SETS. EXCELLENCE IN STANDARD GAUGE DESIGN AND CONSTRUCTION FOR REMARKABLY LOW COST. SEND \$1.00 FOR YOUR CATALOG TO:
THORLEY HOOPLE TOY COMPANY
1044 WEBSTER ST., PALO ALTO, CALIF. 94301

MARKLIN

HO Ready-to-run Trains are Made by Precision Craftsmen

World's largest line ready-built HO Always a full line in stock!



SEND FOR OUR NEW CATALOGS

1967 MARKLIN CATALOG -- .50

NEW HO D.C. ENGINES designed by Marklin. Complete in above catalog with 50c refundable coupon.

NEW HAMO HO CATALOG _ .50

Traction trolley system operates on D.C.

1967 RAPIDO N ga. Catalog .50

Catalog complete with steam and electric engines, cars, track, switches, figures and buildings.

AUTHORIZED SALES & SERVICE

ALL ORDERS SHIPPED OUT

SAME DAY AS RECEIVED

NICHOLAS SMITH

60 N. 11th St. Philadelphia, Pa. 19107

SPECIALS FROM L & A

Lionel O-4-0 HO Docksides.....	\$ 3.88
Lindberg SW600 Diesel Switcher rtr B&O, SF	\$ 6.88
Varney Tender rtr Casey Jones type B&O, PRR	\$ 1.88
Atheam Freight cars, our choice	\$.99
Tyco 2-8-2 Mikado rtr, SF or PRR	\$19.88
Tyco 2-6-2 Pacific rtr SF or PRR	\$18.88
Tyco O-4-0 Booster rtr UP or NYC	\$ 6.88
Ahm 4-6-4 Hudson rtr NYC	\$22.88

Add 50c on orders under \$10.00

L & A Hobby Suppliers

P.O. Box #5954 Chicago, Ill. 60680

110 FT. HO SNOW SHED



All parts cut to exact size from selected white pine\$3.95
DEALERS: Order your stock of Mil-Scale Kits now. (Folder on request).

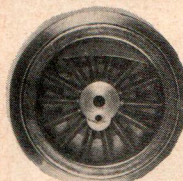
MIL-SCALE PRODUCTS

BOX 4144 WESTERN STA.,
MILWAUKEE, WIS. 53210

Western
STR NO BUILDING & STRUCTURE **EET**
NEW 1966 CATALOG 25'
Box 536 *Real-Like* Chula Vista
SCALE MODELS
California

STANDARD GAUGE

Collector's Parts



The WORLD'S
LARGEST ASSORT-
MENT of Replacement
Parts for old Standard
and "O" Gauge electric
trains.

Wheels: Lionel, Ives,
American Flyer. Plus:
Bells - Whistles - Couplers -
Pantograph - Headlights -
Side Rods - Boiler Fronts -
Valve Gear - Eagles.

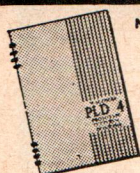
INCLUDING all the fine *Treasure House* Parts to
put that old train in shape for Christmas!

SEE our HO Locomotive and Car kits, Accessories
and Imported Brass Models at your dealer's.
Send 35c for New Catalog.

Model Engineering Works

Box 261 "Unique Miniatures" Monrovia, Calif.

BE AN EXPERT ON RAILROAD LETTERING



NEW - First time in print . . .

300 NEW diagrams covering cars of the
early 60's - Long box cars, Center Flow
Hoppers, Private Owners, Diesel Locos,
Piggy Backs, Caboose, and Passen-
ger cars.

Prototype Lettering Diagrams, Book 4\$3.00

Other Lettering Books by W. K. Walthers

521 PLD Lettering of the 30's and 40's\$1.00

PLD 2 Lettering from 1946-19562.00

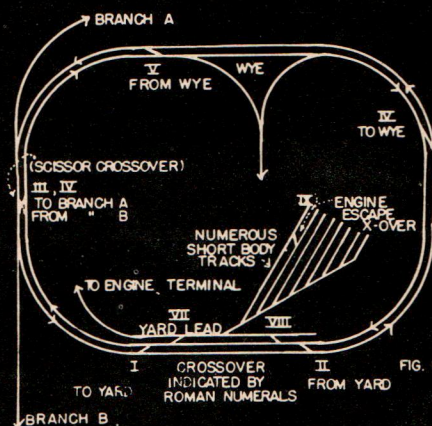
PLD 3 Lettering from 1956-19622.75

Complete Decal Catalog50

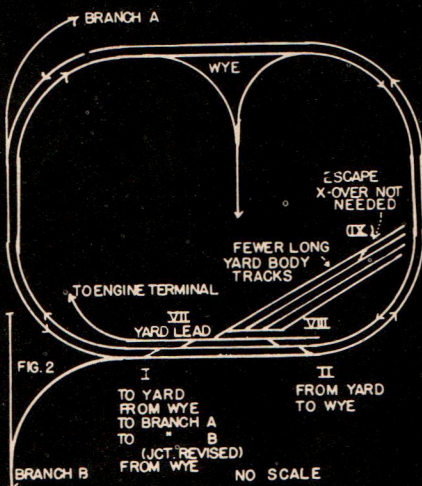
WM K **WALTHERS** INC
1245 N WATER ST DEPT RMC MILWAUKEE WIS 53202

THE CAT KNOCKED OVER MY FOREST

Maybe you can't keep the fam-
ily feline from knocking over
trees on your pike but there are
plenty of other roads to easier
maintenance that should be ob-
served before things get out of
hand — which they can.



NO SCALE
TOO MANY CROSSOVERS



MINIMIZING MAIN LINE CROSSOVERS

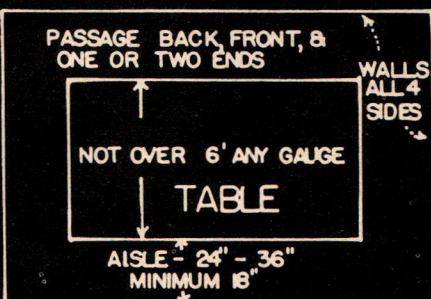


FIG. 3

ISLAND LAYOUT

TRUE ENOUGH that model rail-
roading is fun, they said. Another
not so happy phrase goes something
like this: "Model railroading is 35%
inspiration, 10% exhilaration, and
55% perspiration." For, while model
railroading is fun, it becomes some-
thing less than fun if maintenance is
continually deferred.

In past issues I've covered some of
the various problems which do arise:
locomotive jam-ups, short circuits,
open circuits, etc. I haven't done this
to emphasize the negative; rather I
want the beginner to become aware
of problems which do occur and
should be remedied at the earliest
possible time, even systematically.
The old timers know about these
problems and have learned from ex-
perience how to keep troubles to a
minimum.

The old line O-gauger is perhaps
best off from the maintenance angle.
He might pull a few draw bars on a
heavy train, but he'll have a mini-
mum of trouble with dirty rail, out
of gauge track, or derailling. Cars and
locos are usually heavy enough to
cut through the grease and grime that
can coat railroad track. O gauge track
laid with .172 rail and four spikes
per tie will generally stay put for
years and years without any mainte-
nance.

HOers and other small gaugers
aren't quite that lucky although the
manufacturers have improved their
products tremendously over the past
twenty years, so that many problems
are minimized.

The model rail can also help him-
self by avoiding certain pitfalls which
can cause grief later. We've seen too
many model pikes bogged down be-
cause the electrical work was done
by the guy next door who is an audio
engineer for the local TV station and
has a passing interest in model rail-

by the layout doctor

roading. Unfortunately he has been transferred to a station in southern Utah and nobody can quite figure out his circuitry, and now for some unexplained reason the main line won't function.

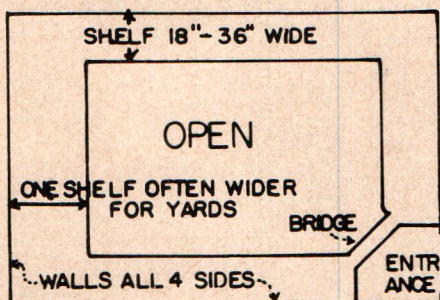


FIG. 4

SHELF LAYOUT

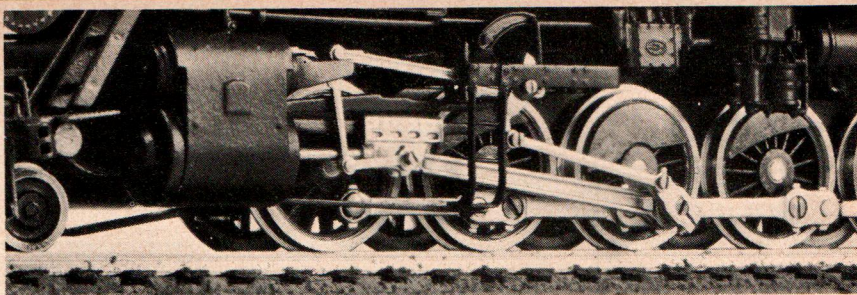
Some newcomers also go whole hog on trackwork, trying to beat the New York Society of Model Engineers for the number of turnouts on their pike. Luckily for the NYSME, they have a whole crew of dedicated members who can track down troubles in any possible errant turnout. The home modeler has to keep tabs on trackwork, wiring, scenery, cars and locos, and a host of other problems. Thus the more elaborate the layout, the more the likelihood of trouble.

There's a *Carstens Law* which says that trouble on a model railroad is most likely to develop when you're trying to impress company. So when company comes, don't try to run strings of freight cars backwards through intricate crossings, and do put all defective cars and locos on the rip track. Or better, attend to dropping couplers, defective trucks, and other repair jobs before showing off the pike. Cars or locos that constantly derail at certain spots should be repaired, not just rerailed.

Steam locomotives are somewhat more delicate than diesels because of their valve gear, wheel arrangements, and tenders. Locos should be checked periodically for loose screws that can cause side rods to drop, trailing trucks to short against fireboxes or frame, loose rims, and similar problems. Best bet is to watch for defects when giving locos their regular greasing and oiling prior to operating sessions.

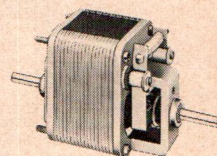
Layouts can be kept clean by covering with thin polyethylene film, or even old newspapers. Some modelers have found that layouts stay cleaner with air purifiers.

RAILROAD MODEL CRAFTSMAN



CONTROLLED POWER DC-86

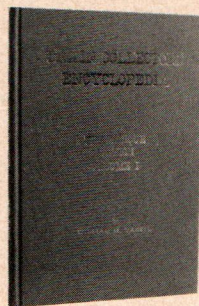
"Scale motion" IS model railroading, and Pittman motors have the easily controlled responsive power to provide the ultimate in realism. Renowned for their great reliability, Pittman train motors have become the standard of the industry. Specially developed for railroad use, Pittman offers the broadest range of motors in the world for HO thru O gauge, in stock, ready to go to your distributor.



CORPORATION SELLERSVILLE, PA. 18960

Tell Our Advertisers You Saw It in RAILROAD MODEL CRAFTSMAN

TRAIN COLLECTORS ENCYCLOPEDIA



by Bill Vagell

ORDER
TODAY

\$6⁵⁰

PPD.

Dealer Inquiries Invited

Bill Vagell has packed a lifetime of experience in selling and repairing toy and scale model trains into the pages of his new *Train Collectors Encyclopedia*. This hard covered 160 page gold stamped volume lists virtually every Lionel item ever made. More than 225 different photos and drawings depict rare old collectors' pieces, wiring diagrams and parts identifications. Included are many photos of the foremost collectors with their trains. *Treasure House Bulletins 1-5* are also reprinted and included.

Train Collectors Encyclopedia by Bill Vagell is an unusual collection of photos and facts that belongs on the shelf of every collector and every dealer in old toy trains.

MODEL CRAFTSMAN PUBL. CORP.
6 EAST MAIN ST.
RAMSEY, N. J. 07446

Reader Service

4036

Please rush me.....copies of *Train Collectors Encyclopedia* by Bill Vagell.

I enclose \$.....in check or money order.

NAME.....

STREET.....

CITY.....STATE.....ZIP.....

Please print or type legibly

RMC CLASSIFIED ADVERTISING SECTION

COMMERCIAL CLASSIFIED ADVERTISING: rate 20c per word. Count all initials as words. Zone or zip number free. Fourth insertion of same ad free. Ads payable in advance. We must have home or business addresses for all ads using P.O. box numbers, for our files. Ads must be at Ramsey not later than 5th of month, two months preceding date of issue. SEND ALL ADS TO: Classi-

fied Ad Dept., RAILROAD MODEL CRAFTSMAN, 6 East Main Street, Ramsey, New Jersey 07446. Ads sent to other departments may be delayed or lost. CLASSIFICATIONS: Model Railroad, Railroadiana, Custom Building Services, For Sale, Wanted, Help Wanted, Positions Wanted, Toy Train Collectors, Miscellaneous. All ads are accepted subject to the approval of the publisher.

MODEL RAILROAD

UNUSUAL ITEMS. Lionel 027-0-072. New—Used—Trade-ins—Sales—Service—Parts. Gar-Graves Track, Switches. Catalog 25c. Riedel's. P.O. Box 4244, Euclid, Ohio 44132. TF

1/4" FINE SCALE—Standard, Narrow Gauge—Trucks, Plans, Kits. Detail Parts List 10c. Coronado Scale Models, 1544 E. Cypress, Phoenix, Arizona 85006. 2-67

LIONEL TRAINS. Complete supply, many discontinued items. Bargain list 10c. Lionel Catalog 35c SAE your list. Pelican Model Shop, 2815 Main St., Baton Rouge, La. 2-67

PROMPT SERVICE. Wood, Scale Lumber, Screws, Paint, Track, Scenery Tools Couplers, Trucks, Kits, Engines and Custom Work. Tyco engine parts and service. Catalog 25c refundable. Al Strete Box 2874C, Columbus, Ohio 43204. 11-66

FREE LIST HO SCALE LOCOS & SUPPLIES. New, used and sale items. Hobbies For Men, P.O. Box 149, Beacon, N.Y. 12508. TF

STYRENE PLASTIC SHEET, ROD AND TUBE STOCK. S.A.E. for price list Thwaites Plastics, 2555 Sinclair Rd., Victoria, B.C., Canada. 12-66

TRAINS! 25c brings 32 page bargain catalogue. Thousands of Lionel, Gilbert, Varney, Atlas, Tyco, Athearn, etc. Trains. All gauges. Hobby Surplus, P.O. Box 1106C, New Britain, Conn. 12-66

TROLLEY TALK Volume II, new slick paper, issues 21-40, \$6.00. Volume I, issues 1-20, \$4.25. Five issue subscription \$1.25 until December 31, sample copy 35c. 59 Euclid Ave., Cincinnati, Ohio 45215. 12-66

CANADIAN MAIL ORDER SERVICE. Send 50c for new illustrated catalog. Harbern Model Supplies, 661 Simpson Ave., Winnipeg 15, Man. 1-67

HO SCRATCH BUILDING SUPPLIES, Locos, Car Kits, Buildings, Landscape Materials. Custom Precision Machined Loco Frames, Sketch for quote. Free List, Mail Order Only. R & S Hobby Supply, P. O. Box 2243, Van Nuys, Calif. 91404. 12-66

LOCOMOTIVE REPAIRS \$3.00 up. Postage Extra. Particulars on Request. Beaver's Hobby Lodge, Box 3311, Harrisburg, Pa. 17105 tf

HO—H0n3—New enlarged catalog, 25c. Refundable. Park's Hobby, Box 624, Asbury Park, N. J. 07713 1-67

1/4" AAR Standard, 3 1/2', 3' 2' Gauge Supplies—Gilpin Trucks in stock—List 15c. Coronado Scale Models 1544 E. Cypress, Phoenix, Ariz. 85006 2-67

KANSAS—MIDWEST MODELERS, Craftsman Kits, Scratchbuilding supplies. Send stamped envelope for list. HO Craftsman Club, 343 1/2 N. Fern, Wichita, Kansas 67203.

HO BELLRINGERS: In stock or coming—here's America's all time new roster of popular priced locos. Athearn's diesels — SD45 \$11.50, SDP40 \$11.50, SW1500 cow & calf combo \$11.50, Top value GP35 \$9.50, Gaint DD40, single mtr \$15.50, twm mtr \$19.50. AHM's superb—NYC J3a Hudson \$22.50, U25c \$12.50 V&T Bowker 2-4-0 \$12.50. Yes, we'll reserve your UP "Big Boy" 4-8-8-4 at only \$37.50 & EMD's renowned E8 diesel \$11.50. Tyco's latest—Alco 430 diesel \$9.50, 1890 steamer 4-6-0 \$9.90, winner Prairie 2-6-2 \$11.90. Bonus offer—AHM's 1920 series, \$8.00 value, RPO/Coach combo, now \$5.90 set. Athearn's 5 car freight combo, \$10.00 value, now \$6.90 complete. Just released—Bowser's new USRA 4-8-2 Mtn., only \$29.90. Postage USA—add 25c. For best service . . . CROWN POINT MODELERS, Box 66, Essexville, Mich. 48732.

HO GAUGE EQUIPMENT. Used. 10c for list. Gottshall's, P. O. Box 34, Port Kennedy, Pa. 19463 2-67

BARGAIN LIST HO KITS FOR SAE. Rare one of a kind: locos, cars, buildings, new and used. CLEMENT HOBBIES, P. O. Box 2381, Rome, Ga. 30161 2-67

MODEL RAILROAD

2 Ft. GAUGE—Plans, Books, Trucks, Parts. Catalog 10c. Frascati Models, Rt. 1, Box 427-A, Theodore, Alabama 36582. 12-66

Sn3 D&RGW BOXCAR KIT—Tomalco Castings, Grandt door & end details, NE wood, Thin Film decals, Pruitt plans, \$9.50 less trucks, couplers. TOMALCO TT plus all Kemtron TT and S items. TOMALCO, Box 158, McCracken, Kansas 67556. 12-66

BUILD PASSENGER CARRYING, lawnmower engine powered trackless "1880" train. Construction packet: drawings, photographs, instructions only \$4.50 postpaid. Illustrated literature \$1.00 refundable. Dudley's Trains, 901 Cole, Huntsville, Alabama 35802. 11-66

MANTUA PARTS for most old Mantua metal locomotive and car kits. Ned Saiter "Hobbies", 1009 Markley St., Norristown, Pa. 19401. 1-67

KCT TRANSFER CABOOSE in HO! Improved second run ready now! See your dealer or order direct. \$3.95, postpaid (less trucks, couplers). Liberty Models, Inc. 3923 South Liberty, Independence, Missouri 64050

O SCALE Max Gray Texas and Pacific 2-10-4. O scale Reading 4-6-0 Camelback. Also HO Texas & Pacific 2-10-4 and other HO items. Estes Hobbies, 164 W. Main St., Norristown, Pa. 19401

SOUTHERN RAILWAY GREEN PAINT. Authentic steam locomotive color. Special mix. Limited quantity. Higrade enamel. 2 oz. bottle, \$2.00 postpaid. Thinner, 2 oz. bottle, \$1.00 postpaid. Dan's Trainland, P. O. Box 8121, Mobile, Ala. 36608

XMAS SPECIAL FOR HOERS! Purchase any 5 Frontier Bldgs. made of 1/16" Plywood, and get a Blacksmith Shop free. Easy to assemble, 8 different bldgs. Also available 30' truss rod O gauge car kits. Send SAE for illus. brochure. Lazy Axe Models, P. O. Box 3142, Granada Hills, Calif. 91344.

WANT TO BUY

WANTED: TENDER & CABOOSE for BUDDY L train. H. L. Jacobs, Wagontown, Pa. 12-66

MARCH 1965 Railroad Model Craftsman Complete. W. V. Thorpe, 1624 Loring, San Diego, Calif. 92109.

LIONEL 156 Station Platforms, 2600 Pullmans 2426, 2671 Tenders. Nice condition or new. Ronald Jergovich, 17258 Keystone, Detroit, Mich. 48212.

FOR SALE

BACK ISSUES CRAFTSMAN, TRAINS, RAILROAD, RAILROADER, others. Prices, lists for stamped envelope. Arnold B. Joseph, 2512 Tratman Ave., Bronx, N. Y. 10461.

MARX COLLECTORS, 15 page reprint rare catalog, plus 7 pages data, \$4.00 postpaid. Smiley, 13709 Casimir, Gardena, Calif. 90249.

JOB OFFERING

SEVERAL OPENINGS for qualified men as hobby shop salesmen and in wholesaling all hobbies. Full time. RMC will forward any and all applications to firms concerned, in northeastern area. Applicants should have completed their military obligations or be draft exempt. Write: JOB, c/o Railroad Model Craftsman, Box C, Ramsey, N. J. 07446.

RAILROADIANA

RAILROAD PRINTING! All your needs. New Catalog, sample; 25c. refundable. Salamanca Press, Salamanca, N.Y. 14779. 11-66

NEW MEXICO RAILROADER. History, photos. April quarterly has 8 ng. plans. \$2.00 yearly, single issues 75c. 7800 Pickard, Albuquerque, N. M. 87110.

SIXTY DIFFERENT RAILROAD SOUND RECORDS. One source, exclusive catalog free. Railfan Records, 300 Chelsea, Louisville, Ky. 40207. TF

RAILROADIANA

NEW YORK ONTARIO & WESTERN RAILWAY 1898 employee timetable reproduction. Fascinating, lists Chicago through trains. Now abandoned, \$2.00 ppd. Model Craftsman Publishing Corp., 6 East Main Street, Ramsey, N.J. 07446. tf

TIMETABLES, Annual Reports, Train Folders, RR Postcard Views, Wanted: Alden Miller, 3212-34th Avenue South, Minneapolis, Minn. 55406 1-67

BRITAIN'S RAILWAYS UNDER STEAM (Nock). 200 pix, 20 colored. 224 pp. \$7.50. Booklists with conversion available. Clyde, Box R, The Mount, Ewell, Surrey, England. 1-67

PRINTED PASSES! Samples free. Sargent's, 1502 Crockett, Amarillo, Texas 79102. 1-67

NEW YORK CENTRAL DINING CAR SILVERWARE. Silver serving items: Spoons, Trays Syrup Pitchers, etc. Large S. A. E. for list. M. W. Blankinship, 3555 Bainbridge Ave. (2-H), Bronx, N. Y. 10467 2-67

RAILROAD "SPECIALTY" PRINTING: Free engravings, art design. "Special" 250 Passes — \$5.00. Samples, catalog 25c. 1,000 embossed business cards — \$5.75. Valentine Press, 911 Coreth, New Braunfels, Texas 78130 2-67

FINELINES. The Magazine for the fine scaler. \$2.00 per year (5 issues). Robert Brown, 985 Campbell Ave., Los Altos, Calif. 94022. 12-66

SLIDES & PHOTOS. Lists and sample, 35c. Specify roads. Also slides made from your negatives, photos, color cards. SAE for particulars. 35-Slides Co., Box 6666, Green Mt. Falls, Colo. 1-67

CUSTOM BUILDING SERVICES

SCALE O GAUGE. Locos, parts, kits, cars, etc. Machining Two Railing Conversions, Custom Building & Painting. Trade-ins accepted. Olney Miniature Train Shop, 737 Hoffnagle St., Phila., Pa. 19111. Phone: FI 2-6304. ti

DRY TRANSFER LETTERING — Custom made with your railroad's name, herald, etc. Send 25c for sample, details, new enlarged catalog. Park's Hobby, Box 624, Asbury Park N. J. 07713 1-67

CALIFORNIA COLORS CUSTOM PAINTING . . . Specializing in fancy work (Daylights, PS4's, etc.). Large SAE for quote and photos. 4069 Parron St., Camarillo, Calif. 1-67

TOY TRAIN COLLECTORS

WANTED—TOY TRAINS, built before 1942. Send price and description. Top prices paid. Jack Windt, 1939 Golf St., Sarasota, Fla. 33577. TF

OLD TRAINS, all kinds, bought, sold, repaired. Trolleys and catalogs wanted. What have you or what do you need? Will trade new Lionel HO. Frank Rochat, P.O. Box 241, Carlstadt, N.J. TF

WANTED OLD TOY TRAINS. Lionel, Ives, Flyer, Dorfan, Boucher, Voltamp, Bing, Marklin, others. All gauges. Nobody pays more. John Cox 1765 Sixth South, Seattle, Wash. 98134. TF

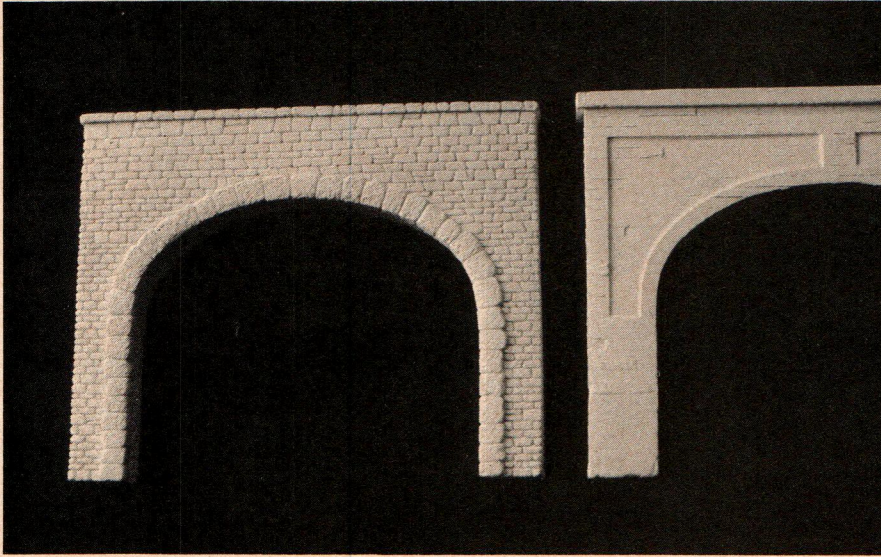
COLLECTORS & RESTORERS — Rubber Stamps for sale. Send SAE for information. Lewis Simmons, 1436 Tulare, Upland, Calif. 11-66



Fight tuberculosis and other respiratory diseases

Use Christmas Seals on All Your Holiday Mail!

TEST TRACK



Double track tunnel portals by Campbell Scale Models offered in both old stone and modern concrete styles, are molded in white plaster, well packed. Openings are designed for varied HO curves.

Tunnel Portals: HO

Mfd. by Campbell Scale Models, P. O. Box 121, Tustin, Calif.

Campbell Scale Models has four plaster-cast tunnel portals in its line, and since construction is essentially the same in all four units, we'll review them all simultaneously. The four portals are: No. 347 Single Track Stone Portal, \$1.35; No. 348 Double Stone Portal, \$1.60; No. 349 Single Track Concrete Portal, \$1.35; and No. 350 Double Track Concrete Portal, \$1.60.

Each portal is white plaster, nicely detailed, packed in foam rubber and an individual carton as protection against breakage. Each portal measures somewhat over 5/8" thick. Bases are flat enough so that the portal can stand alone. To install, the modeler would run his scenery material, plaster or other, up close to the tunnel opening, pressing the portal in place and being sure that the portal is centered on straight track or installed so as to clear the longest possible equipment if on a curve.

Actually, the Campbell portals have been adapted slightly from actual railroad designs so that they can be used on the sharper curves found on model railroad layouts and also provide somewhat larger openings for ease in reaching in when necessary. The opening widths for the tunnels are as follows: 347, 2 3/4"; 348 and 350, 4-11/16", and No. 349, 2-7/8". The height is sufficient to clear cranes, high cube cars, and other oversized equipment, including 00 gauge equipment.

The modeler will have to paint or weather the portals himself. The stone portals came into being as the

railroads became more established, in the period following the Civil War, and concrete portals came in with the Twentieth Century, though there are wooden portals still in use, relatively new, and stone portals that date back far earlier. The stone design should be wash painted to represent stones of the color found in your area: grey, buff, brown, red, etc. Floquil makes a concrete colored paint for the concrete portals. The concrete portals have the wood pouring form detail cast in (detail which we understand is highly desirable in this modern era on actual structures). After painting, all of the portals will need weathering with a grey wash especially along the cracks and seams. A burning candle is used to put a smoke smudge above the center of each portal if your line is steam operated or perhaps operates diesels in need of a valve job!

The Campbell portals are quite delightful and offer a good variety for the layout. Variations in installation and coloring further widen the types. We did not find the slight increase in width opening objectionable, and, if anything, it is a must as track radii get sharper. Instructions for installation are packed with each kit. Overall dimensions of the double track portal is 6 inches wide and 4 3/4 inches high. These are excellent pieces.

D&RGW K-36 Mikado: HO n3

Imported by Balboa Scale Models, 1135 Garnet Ave., San Diego, Cal. 92109.

The latest narrow gauge locomotive from Balboa Scale Models is a replica

WE'VE MOVED

RMS

Replica Mail Specialties
Box 2820
Grand Central Station
New York, N. Y. 10017

Send for our free giant catalog!



Railroadiana

WHEEL DESK PEN \$10.25
PARKER '45' PEN ON 6" WHEEL

LIMA; PORTER; ALCO PLATES \$5.95
B&O, NYC & PRR PAPERWEIGHTS \$2.50
GOLD SPIKE PAPERWEIGHT \$1.00

POSTPAID - OHIO RESIDENTS ADD SALES TAX

VICART PRODUCTS
Box 88 NEWBURY OHIO

NEW YORK CENTRAL

Passenger Equipment Diagram Book



1890
to
1946

No matter what your favorite road, this will be a handy guide to the **Passenger Equipment** used in the Golden Age of Railroad. 4 1/8"x10 1/4" size. 112 pages. Postpaid \$4.00

Al Stauffer, Rt. 4, Box 145-C, Medina, O. 44256



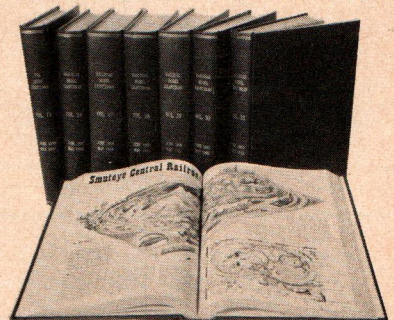
United States Savings Bonds

NOW PAY 4.15% TO MATURITY

Higher Interest on Your Old Bonds, Too!



BOUND VOLUMES OF RMC



Handsome library volumes bound in maroon cloth with gold stamping. Without doubt the finest means of preserving model railroad data. Average over 750 pages per volume. The following now in stock: (Volume numbers run from June to May):

Vol. 32—June 1963-May 1964.....\$10.00

Vol. 33—June 1964-May 1965..... 10.00

Vol. 34—June 1965-May 1966..... 10.00

Above volumes include annual index

Above prices include postage in USA and Canada. Foreign orders please add 50c per volume.

MODEL CRAFTSMAN PUBLISHING CORP.

P.O. Drawer C

Ramsey, N.J. 07446

for the head end . . .
BORDEN'S MILK TANK CAR
 with Cal-Scale passenger brake, Silk
 Screened Sides. **\$4.25**
Dealer Inquiries Invited.
ATLANTIC SCALE MODELS

P. O. Box 2208
 South Portland, Maine 04106

*"Discover a New World of Service."
 (For dealers only.)*



BALBOA

Model Distributors

Model Railroadng Exclusively

1135 GARNET AVENUE • SAN DIEGO, CALIFORNIA 92109

**RR17 BRAND
 NEW!**

Weathered Black:

A new "rusty" black

In Aerosol Cans

RR135 GRIMY BLACK • RR745 BOXCAR RED
 RR165 INSTANT WEATHERING: A weathered
 effect with a flick of the finger.

AT YOUR DEALER NOW
 FLOQUIL INC. COBLESKILL, N.Y. 12043

*Limited supply of the regular edition
 still available . . . order today!*

Iron Horses of the Santa Fe Trail

A magnificent volume containing 612
 pages, 1700 illustrations, covering 5000
 locomotives from 1869 to date...245
 classes in well-written, informative and
 interesting fashion...a book everyone
 will enjoy owning. Printed on heavy
 paper, 11¼x8¼, gold stamped cover,
 protective dust jacket.

\$20.00 per copy

Send order with remittance today to:

Southwest Railroad Historical Society Order Dept.
 1008 - 211 N. Ervey Bldg., Dallas, Tex. 75201

Dealer Inquiries Invited

**Reliable automatic coupling is not enough to make a good coupler
 . . . they must also give reliable delayed uncoupling.**

Kadee "MKD" series couplers do this and more. That's why they are the overwhelming choice
 of the serious and not so serious model railroader. We've been saying they are the best for
 years and to prove our point, look about you. Chances are your friends' railroads are Kadee
 equipped. Glance through the magazines, bulletins and other model railroad publications, notice
 the number of photographs of equipment that carry our couplers. We're selling a lot of them,
 they are good, the fellows like them and they get a lot of simple enjoyment from them. There
 is no other reason. You're missing some mighty fine fun if you're running rolling stock with-
 out them. So that you will always be pleased, efforts are made to make continued improvements
 in our products. Such recent developments are our new Non-Magnetic Trucks and beneath the
 ties "Super-Powered" Permanent Magnet Uncouplers. The "Super-Powered" Uncoupler #308
 uncouples and sets for delayed uncoupling with more positiveness than previously possible. Even
 the most stubborn and sticky "MKD" coupler will pop open. We think that the under the
 tie mounting of an uncoupler is the way of the future. Non-Magnetic trucks have been designed
 to eliminate the tendency of cars with magnetic material in the trucks of creeping into the
 field of magnetism causing slack between the couplers which gives false and faulty uncoupling.
 Our new Series #500 trucks (see our October ad) cannot be drawn into the uncoupler, pre-
 venting this. Automatic coupler action is greatly improved. Bonus features of these detailed
 trucks are ribbed back wheels and founding data "Association Of Manufacturers Of Chilled Car
 Wheels, AAR, 1921" cast on the wheel face in sharp 1/64th inch high letters. You can read
 them . . . it may take a loupe to do it. They are free rolling and the RP-25 contour makes
 them track through switches without upsets. These trucks will definitely improve your magnetic
 coupler action.

stopped over "delayed
 magnetic uncoupler"
 knuckles have opened
 NEXT...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

THEN...

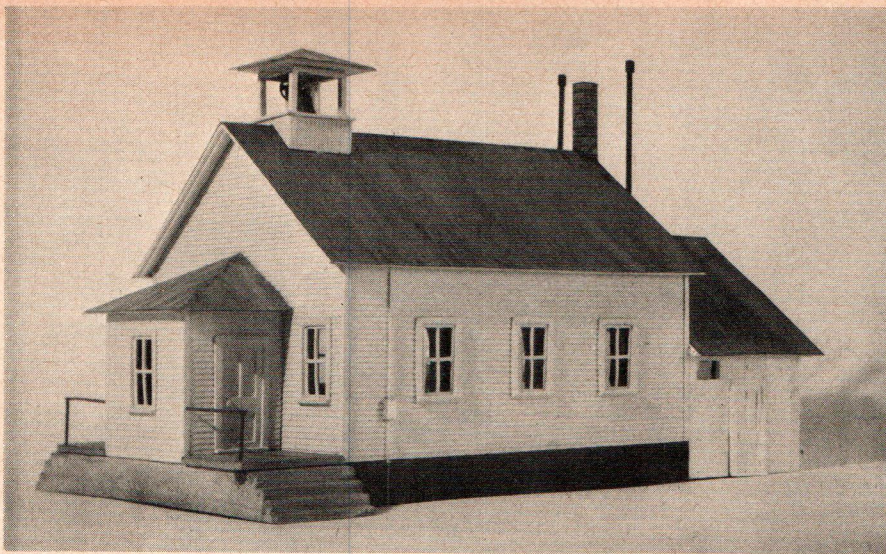
THEN...

THEN...

THEN...

THEN...

THEN...



Country school house is accurate replica of structure in Kent County, Michigan, and a type of building not often seen on most model railroads. Alexander Scale Models kit is a fun kit to build.

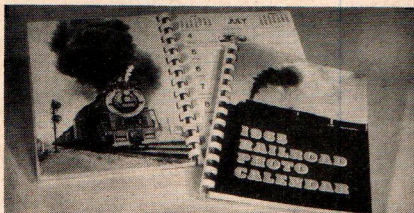
the regular Balboa line. Three foot fans will find this a good one at \$59.95. JW.

Country School House: HO

Mfd. by Alexander Scale Models, P. O. Box 7121, Grand Rapids, Mich. 49507.

Alexander Scale Models, now under new management of Glenn L.

1967 RAILROAD PHOTO CALENDARS



These new Railroad Photo Calendars are chock-full of real old-time railroading. Designed as either Appointment or Wall type. Handsomely illustrated with beautiful photos of steam, trolley. Perfect gifts.

APPOINTMENT CALENDAR (as illus.) \$2.00

Featuring 52 photographs of Steam and Electric railroading. Measures 7 1/2 x 5 1/2" — 108 pages. Postpaid.

WALL STYLE CALENDARS

STEAM . . . \$1.50 ELECTRIC . . . \$1.50

Either Steam or Electric Calendar brings a full action scene each month. Suitable for framing at years end. Measures 11 x 17" and spiral bound. Mailed to you postpaid in a flat mailer.

RAILROAD MODEL CRAFTSMAN 5116

P. O. Box C

Ramsey, N. J.

I enclose \$..... in cash or money order. Please send me the railroad calendars checked below:

- ☐ 1967 RR Photo Calendar, Appointment at \$2.00
- ☐ 1967 RR Calendar, old steam lithos, at \$1.50
- ☐ 1967 Steam RR Wall Calendar at \$1.50
- ☐ 1967 Elec. Ry. Wall Calendar at \$1.50

NAME

STREET

CITY STATE

Please type or print legibly

"Rip" Van Winkle, is a model of the Morse Lake School in Kent County, Michigan. This school is white, many others of similar design were red. This type of school is fading rapidly as new regional schools replace these once familiar structures, which many RMC readers possibly attended.

This is a well designed kit with step by step instructions. Excellent drawings and exploded views in various stages of construction, including an isometric view of the completed structure, plus photos of both prototype and model are included and make construction a pleasure.

Included in the kit are die-cut walls including window openings, North-eastern stripwood, die cut card stock for sub roof, die cut bristol for the utility room, castings for doors and windows, cast bell, window acetate, wire, balsa for foundation and chimney, brick paper, and embossed metallic paper roof.

Assembly is not complicated so novices can try this one and not run into too many snags. No special tools are necessary other than those the modeler can be expected to own already. The wood should be sanded before construction starts. We also recommend weathering the roof since one rarely sees a brand-new shiny tin roof. The roof material provided weathers easily with Floquil or other weathering mediums. The tin roof turns light grey in use, and then begins streaking with rust after a short period unless painted.

All too often, the model rail will ignore the need for schools on his model railroad yet they are seen from train windows in town after town. This kit can also be converted into a small country style church, with substitution of various style steeples. The model has no base or floor, making it useful in covering a relay or other electrical gadget. This is a very high quality model at a good price: Kit RS-750, \$3.50. Lee Nicholson.

PROBLEM?

Are you bothered by gift giving headaches for railroad men? Let Replica Mail Specialties come to your aid for one stop holiday shopping. Send for our free catalog, today.

RMS REPLICHA MAIL SPECIALTIES
Dept. RC 116 A
Box 2820, Grand Central Station
New York, N.Y. 10017

HO locos that are DIFFERENT

Standards, too, new & used.
C&O 2-8-4 ex-PFM, \$85

Full list for SAE
LAYOUT PLANNING SERVICE;
specific inquiries, pliz

WILLIAM SCHOPP

445 S. Logan Ave. Trenton N.J. 08629
Phone: day or eve. (609)-695-2202
Carbon Electrode Soldering Tweezers, \$24.75

"COLLECTOR COLOR"

Matched colors for old toy trains in a Spray Can.

#213	Pea	#309-A	Brown	#421-A	Dark Blue
	Green	338	Mojave	425	Girard
213-A	Terra	338-A	Black		Green
	Cotta	338-B	Maroon	425-A	Dark Green
217	Peacock	421	Med. Blue		Cream
217-A	Red			514-A	Orange
309	Tan				

12-oz. aerosol Spray Can ready to use, \$3.50 each. Add 35c for postage and handling per can. Mail Check or Money Order to: Collector Color, Box 1781, Lancaster, Pa. 17604



OVER 1000 LOCOMOTIVE DRAWINGS

Original, Railroad or Builders
1830s to end of steam.

Large SAE (10c Postage) for either
List 2R — Pennsylvania Railroad
or

List 1R — All other roads

EDWIN P. ALEXANDER

Box 333, Yardley, Pa. 19068

HMW KITS

K2001 A&S Transfer Caboose 1/t&c \$3.65

K2002 Little Hook less trucks & cplrs. \$4.10

K3001 Pile Driver—Steam Donkey.....\$2.10

K3002 Steam Donkey Crane.....\$2.75

K3003 Log Loader\$2.75

Precision castings — Precut wood

RTR BRASS IMPORT

PTC SNOW SWEEPER

3 Motors

Operating Brushes **\$37.95**

All postpaid. Pa. res. add 5% sales tax.

CATALOG FOR 5c STAMP

HUNTINGDON MODEL WORKS

P.O. Box 7

Huntingdon, Pa. 16652



Add trackage to your yards with our 3 way Lap Switch. Switch made with No. 8-10-6 frogs. No car or loco restrictions . . . \$18.60

OTHER CUSTOM SWITCHES

No. 5, 6, 7, 8, 10 Right or Left 5.40

No. 6, 7, 8, 10 Crossovers 10.75

No. 6, 7, 8, 10 Double Crossovers . . 24.60

Switch Kits 3.55

Slip Switch 25.95

No. 6, 7, 8, 10 Curved Switches 7.15

Curved Xings 7.15

10" to 90" Xings 5.95

HOn3 and Dual gauge also available.

Mounted on Tru-Scale or fibre roadbed.

Choice of nickel, silver or brass rail. Code 100 or code 70.

NEW! Curved Crossovers 17.95

SATTLE'S HO DEPOT.

1510 Cedar Ave. Cincinnati, Ohio 45224
Dealers' Inquiries Invited

Convincing scenery is a combination of many textures and careful modeling. Amron foliage makes the texture part easy. Convince yourself. Only \$1. per package.

Amron Products
Box 219-C, Ingleside, Texas, 78362

"FINISHING TOUCHES"
Let "Finishing Touches" provide your tiny, difficult super-detail pieces — save your time for the big projects.
HO "Finishing Touches" catalog, 25c (refundable)
O "Finishing Touches" catalog, 25c (refundable)
SELLEY, INC.
746 Clay St. Winter Park, Fla.

S **ATISFIED . . .**
WITH YOUR PRESENT GAUGE?
START MAN-SIZE RAILROADING
IN THE MIDDLE-SIZE GAUGE
Send for free brochure
SEE WHAT IS AVAILABLE
S GAUGE HERALD, BOX 105C
ORADELL, NEW JERSEY

RAIL—3 FOOT LENGTHS
HO Gauge .100 high, 99 feet, Brass.....\$3.75
HO Gauge .100 high, 99 feet, Nickel Silver 5.95
S Gauge .125 high, 99 feet, steel.....4.50
S Gauge .125 high, 99 feet, Nickel Silver 10.00
O Gauge .172 high, 99 feet, Brass.....10.95
O Gauge .172 high, 99 feet, Steel.....7.95
O Gauge .172 high, 99 feet, Nickel Silver 18.00
Postpaid in U. S. Dealer Inquiries Invited
MODEL RAILROAD PRODUCTS
1379 Mineral Springs Ave., N. Providence, R. I.

LEES HOBBY SUPPLIES INC. PEN OILER
125
9 1/2" overall reach
NEW
Finger tip control of oil drops, dispenses a drop or a fraction of a drop, extends to 9 1/2" overall reach, .035 stainless steel tube, oil flows through "needle-thin" tube applicator, retracts into container, permanently attached tube sealing cap. Lees is proud to supply you with this handy instrument.

4 GREAT NEW LEES CATALOGS
R/C PLANES & BOATS—over 100 pgs. 75c
RAILROADS—more than 100 pgs. \$1.00
SLOT CARS—over 34 pgs. 25c
MINIATURE FIGURES—73 pgs. of items 50c
ORDER ONE, OR ALL FOR \$2 & SAVE!
Cost of catalog is fully refunded with your first merchandise order for \$5.00 or more.

Send mail order and all correspondence to:
Lees Hobby Industries Inc.
2094L Fifth St., E. Meadow, N.Y. 11554

VISIT ONE OF OUR 3 GREAT STORES OR MAIL ORDER NOW!
Nassau County, L.I.
Complete Hobby Shop
2072 Front St.
E. Meadow, L.I.
Speedway & Slot Cars
2686 Hempstead Tpke.
Levittown, L.I.
next to Howard Johnson
Suffolk County, L.I., N.Y.
Complete Hobby Shop
3018 Jericho Turnpike,
Elwood W. of Commack



A collapsed storm sewer and a very heavy rainstorm caused this damage on George Eschbach's Pennsylvania Railroad (Central Div.) 42 inch layout was inundated by 44 inch water level, leaving a sopping layout dripping with mud, twigs, leaves, and debris. Bill Echternach shot the flash photo while the power was off.



TROUBLE SHOOTING

Conducted by Bill Schopp & RMC Staff

Questions for Trouble Shooting are welcome on any model railroad subject. Questions should be brief and to the point. We cannot undertake individual layout design work, nor can we recommend brands of merchandise. We will print those questions deemed of greatest interest to our readers. We will attempt to answer questions by mail when return post cards are included but cannot guarantee to answer all questions: Trouble Shooting, c/o RAILROAD MODEL CRAFTSMAN, 6 East Main St., Ramsey, N. J.

Slow Speed Running

Several Readers: I like to run diesels and have my units tuned up to the point where I can run them at dead slow speeds. However these tend to stall at the insulated (or isolated) switch points. Even with two units running together, the first one may stall and let the second slip its wheels until I give a shot of extra power. I know I could replace all my switches with ones having all-rail frogs (un-insulated), but is there any other way of running the engines slowly through the yard area?

ANSWER: If your engines have all metal wheels you could rig insulated pick-up feelers on the insulated wheels to give 4 whl. pick-up and 4-whl. return on each engine.

However if you can run more than one unit at a time, try coupling them semi-permanently and run jumper wires between the units so that the front truck of each picks up, the rear truck on each returns. Thus, if a truck on No. 1 stalls at an insulated frog or on dirty track, the corresponding truck on No. 2 will continue to pick-up. But thanks to the jumper wires between units, No. 2 will not be stopped also but will provide power to

keep No. 1 moving until it is picking up current again.

It is not easy to uncouple such units, however, since wires must be disconnected—on real engines, jumpers are simply unplugged. "Cow and calf" diesels thus make excellent switching units for a model railroad, which uses insulated or isolated frog switches.

True Scale

E. B.: Are all HO scale models really that: true HO scale?

ANSWER: AH, gentle reader, do fairys really exist? Model railroading in any of the popular home sizes must inevitably result in a compromise. Thus steam loco models are powered with DC electric motors. O gauge steam locos often have third rail shoes. HO trolleys often run on 2-rail track. Flanges are oversized and passenger cars are made with 20 ft. sections omitted to permit operation on curves that would make a real railroad man wince.

Just far far you, as a model railroader, will accept compromise will be governed by a wide variety of factors including the space you have available for a layout, your pocket-book, the time you have for scratch-building plus your model building

NOVEMBER, 1966

skill, the work done by your model railroading buddies, and your own ideas on model railroading. Many operators are content with the ruggedness of tinplate equipment. Others demand individually laid wooden ties with four spikes per tie and the widest possible radius curves. Most modelers are found somewhere in the middle, taking the best from both ends.

Gem S-1 on Curves

R. S.: I have a Gem PRR S-1 6-4-4-6 (World's Fair Engine) and would like to be able to run it on my layout which has 26" radius curves, below the minimum required. How can I adjust it to make it take these curves? Also, is it possible to make it rigid frame as was the original?

ANSWER: Making it take 26" curves is work, but it has been done, about as follows: (1) adjust balance of engine so that weight is centered above rear pair of drivers; (2) use fingers and flex skirts outward about 1/16" each side to give more swing to front cylinders; (3) remove wrapper from front cylinders and reshape outside of cylinders above piston to 5/8" radius to allow more room for swinging; (4) remove outside front VG hanger and mount knee shaped link on inboard bearing; (5) attach union link in front VG to valve rod and omit radius rod, which scarcely show anyhow; (6) move front airpumps on frame in as far as possible; (7) replace front airtanks with 3/4 circles of brass tubing around frame, in effect moving them in as far as possible; (8) adjust springing of drivers as well as pony trucks—truck light front drivers lights, rear drivers strong.

If frame is rigidized (not saying how), the extra heavy frame sides could be filed thinner, then buffed, for drivers #2 and #4, giving more sideplay to drivers. Leading and trailing trucks could then be suspended from "booms" (similar to Varney supers, LMB Hudson) that would keep them centered and pulled down with small springs. As far as I know this hasn't been done, but is mainly a suggestion for someone to try; all eight steps listed above could be eliminated.

High Frequency Lighting

R. W.: Whatever happened to high frequency lighting which would let you keep train lights on even when the train stopped?

ANSWER: As far as I know it is not now commercially available. Good ideas often come along that seem like great ideas for making model railroading better but they fail because of various inherent faults: insufficient public response, excessively high cost, difficulty of installation, and excessive maintenance. Thus such good ideas as Astrac, cold steam, and 2D have bitten the dust, at least for the present. We think future signal and wire circuits will make wide use of micro-dots, printed circuits, male and female pre-planned wiring systems,

and some type of sensing devices that will eliminate need for many relays. Meanwhile, keep the lights on in passenger cars by putting C cells in your baggage cars and stringing wires from car to car. A terrific idea Lionel dreamed up back in 1912!

Smoke For Model Locos

L. P.: Can you suggest a way to make smoke come out of a model steam loco?

ANSWER: The Seuthe smoke generator units are available, ready to install. Worst part of the job, in some cases, is drilling through the smokestack. Seuthe units are available from Palmer Distributing, P. O. Box 143, Bronxville, N. Y. 10708, at \$1.98 per unit. Specify 3-14 volts or 6-16 volts. Smoke fluid if 98c per package extra. And mention RMC, please!

Weighting The General

N. D.: How can I add weight to a Tyco General to increase pulling power?

ANSWER: Get some flattened pieces of lead 1/8" thick and replace the bottom retainer plate with one made of this material. Lead may also be shaped to fit in a sort of three-legged trouser effect between the splashes over the running board and between the drivers. Screw or cement in place.

Switcher To Prairie

I. C.: I would appreciate information on how to alter my six wheel switcher, with tender, into a 2-6-2 Prairie type loco using a Kemtron lead truck and a Delta trailing truck.

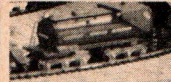
ANSWER: You would, for most HO switchers, have to elongate the space between the front of the cylinders and the back of the pilot beam to give space for the lead truck wheel to run and to swing in an arc on curves. At the back, you would file or saw up into the frame under the motor for the same purpose, or alternately, narrow the frame on both sides to allow some trailing truck swing. A Delta trailing truck would be much too bulky for a small engine and I'd suggest another 2-wheel "lead" truck. The wheels for both pony trucks would have to be located, and the pivot hole location for each determined, then drilled and tapped. "Stretching" the front of the frame to allow for a lead truck would be hard for a beginner, though not much for an expert if he would bother with it. The tender should be replaced with one minus the slope-back for road service.

Custom Made Locos

R. P.: Where can I get locos and trolleys, custom built to my needs.

ANSWER: Several possibilities if you can't do the job yourself. First try the RMC classified ads under the Custom Building heading. Or check with your local hobby shop, who is often geared for such work or knows of modelers who are capable of good custom work. Some manufacturers also offer their kits in built-up form, lettered to your requirements at reasonable and fair prices. A few smaller

THRIFTY VANDERBILT TENDER



32' or 37' 2 blocks, oil bunker milled to tank.

ea. ppd. \$1

ROUNDHOUSE
5116 Lankershim Blvd.
North Hollywood, Calif. 91603



NEW fall-winter catalog featuring 720 old time HO building kits. Famous Edward Black self-adhering pre-colored siding, roofing and windows featured. Send 25c in coin or see your local dealer.

EDWARD BLACK
406 S. 2nd, Alhambra, Calif. 91802

PERMA-SCENE SCENIC TERRAIN. REALISTIC! EASY!

Earthy color, realistic. Easy to use. Crack resistant. Fireproof. Feather weight.

Next to nature Perma-Scene makes the most realistic model scenic terrain AND it's so easy to use too. Just mix it with water, spread over wire screening, let dry. Easily painted. Produces the ultimate in scale realism.

Regular size (covers 8 sq. ft.) \$1.00
King size (almost 3 times as much) \$2.00

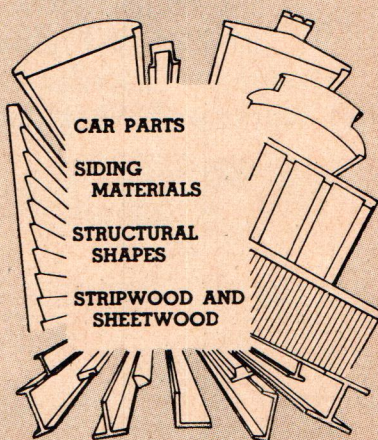
AT YOUR DEALER

PERMACRAFT PRODUCTS, INC.
550 E. Erie St. Painesville, Ohio

GOING TO BUILD?

Northeastern has just installed 8 brand new West German precision wood cutting machines, giving us the finest model wood ever. NEW—HO 1" scale thick fascia strips.

TT — HO — S — O



SEND 25c NOW for new catalog listing many new items plus your packet of more than 30 samples of our famous wood parts. (Be sure to state your gauge)



NORTEEASTERN

SCALE MODELS, INC.
BOX 1A BALLARD VALE, MASS.

O GAUGE LOCOMOTIVES

STEAM, DIESEL, ELECTRIC, SWITCH
AND SPECIAL TRACKWORK

Send 25¢ for Catalog
BALDWIN MODEL LOCOMOTIVE WORKS
P. O. Box 161 STRATFORD, CONN.

HO CAR KITS

by
CENTRAL VALLEY

CATALOG
FOLDER 106
13000 SATICOY STREET NORTH HOLLYWOOD CALIFORNIA

RAILROAD EMBLEMS

(CLOTH PATCHES)

More than 200 Road Names
Some Very Rare
Send 20¢ in coin or stamps for 16 page
catalog, or send one Dollar for 2 patches
and 16 page catalog.

M. B. AUSTIN

138 W. 25th Avenue San Mateo, Calif.

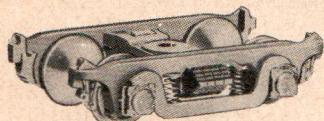
SERVING HOBBY DEALERS "West of the Rockies" SINCE 1933

WESTERN MODEL Distributors

2080 East 25th St., Los Angeles, Calif.
1465 Factor Avenue, San Leandro, Calif.
2602 West Encanto Blvd., Phoenix, Ariz.

WRITE TO NEAREST BRANCH

NEW! HO Micro-Motive RP-25 Low-Profile Freight & Passenger Car Trucks and Wheel Sets



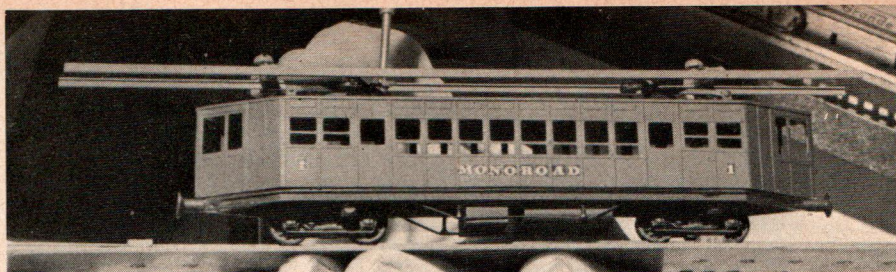
201 Roller Bearing 4-Wheel Passenger.....	Pr. 1.69
202 Exp. Reefer as above but 33" Whls.....	Pr. 1.69
101 Bettendorf 50 Ton Frt.....	Pr. .95
103 Archbar Freight.....	Pr. .95
106 Symington Hi-Speed Roller Brg. Frt.....	Pr. .95
TM-105 Andrews Heavy Duty Frt.....	Pr. .95
133 Replacement 33" Wheels, Set of 4.....	Pr. .49
126 Replacement 26" HO on 3 Wheels, Set of 4.....	Pr. .69
136 Replacement 36" Pass. whls. Set of 4.....	Pr. .69

Our new RP-25 Low Contour trucks and wheel sets provide up to 50% increased power for locos and far less dirt build up on flanges. Less friction, bind, and dirt means better operation.

Replacement wheel sets use Torrington axles and will fit most popular trucks without alteration. All New Cliff Line Trucks and Wheelsets now covered by NMRA Warrant No. 53! Upgrade all your HO equipment. Switch to Cliff Line.

THE CLIFF LINE
SCALE
MODELS

Box 322, Station 1
North Hollywood,
Calif. 91605



Bert L. Caldwell, Clasons Point, New York, with his model of the "Flying Lady", single rail trolley that set speed records in the Pelham Bay area of the Bronx in 1910. Caldwell works for the New York City Transit Authority and maintains a collection of about 100 models in his office.

firms also offer models designed to your needs using engraved copper or brass as a basis, but they must have orders of from four to ten cars or locos.

Trolley Pick-Up Troubles

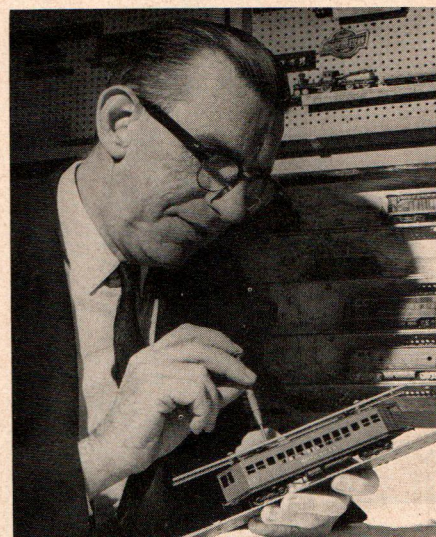
R. W., L. T. P.: We are building HO trolley lines, one interurban, one city type and we both have the same trouble. Cars will not run around smoothly at any speed without stalling and jerking. We dare not hang overhead wire until the operation has been smoothed out. Several months or refinements have still not gotten us near this point, although running on open track (rather than streets) is fairly good. Any ideas?

ANSWER: I gather you are running your cars now by 2-rail, which means that only 2 wheels are picking up on each car, 2 returning. You will have much better running if you will arrange wiring on one car—for a start—to pick up with the trolley pole and return with the 4 un-insulated wheels. This will give you a sprung pick-up and double the number of wheels returning. You can string a short length of overhead to verify this, or even clip a flexible wire from some high overhead location to the trolley pole. The most successful model trolley lines return with all 8 wheels of a car. I assume that you keep track and wheels clean and that you will occasionally go over the underside of the contact wire with a pipe cleaner dipped in lacquer thinner. The contact surface on the pole or shoe should NOT be solder but silver, copper, or brass.

Snow Modeling

W.K.: In planning a year round model railroad having artificial snow with only the rail heads showing, snow on roof tops, etc., would it be practical to have artificial snow cover the track and then remove same with a rotary or wedge plow? What would I use for snow?

ANSWER: Its possible, yes. Some powdered white plastic would probably be your best bet for artificial snow. Don't use any powder that would absorb moisture. Plastic too finely ground might also suspend it-



self in the air and clog up locomotive gears. We also fear that white snow will quickly look pretty drab when covered with dust, soot, oil burner grime, and other dirt particles. And should go on a rampage.

Moody's Railroad Guides

P. G.: How can I tell when an old railroad in which I am interested was absorbed by another railroad?

ANSWER: Suggest you try your local public library and check their Moody's Investors Guide for Railroads, or a similar publication by Poor's. Such guides are loaded with inside corporate data, routes, histories, etc. Included are lists of railroads giving dates abandoned or merged. Some of the new railroad books on the market often have such data, if they pertain to your particular railroad interest.

Polished Valve Gear

M. M.: Most builders photos show valve gear as being shiny bright whereas I recall valve gear as being duller. Explain.

ANSWER: The valve gear was often shined up for the official photo, for appearance and visibility. Some few engines were operated with shiny valve gear but generally the valve gear was a darker metallic color, such as obtained when rubbed with graphite, which will make the gear work more smoothly at friction points and joints. Ditzgen's Opaque in black works quite well. The use of shiny bright valve gear and locomotive driver tires on models is something of a fetish but it does dress up a model—among those who don't dig weathering.

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

Arizona, Phoenix—Hobby Den
6012 N. 27th Ave. CR 7-2972

Arizona, Phoenix—Webster's Hobby Shop
521 E. Camelback Rd. AM 6-5343

Arizona, Tucson—Townsend's Art-Craft & Hobby Shop
2751 N. Campbell Ave. EA 5-0112

ARK., LITTLE ROCK—Bill Binz Co.
1622 S. University MO 3-9812

DEALERS—
For full information on low cost Dealer Directory advertising, write to Railroad Model Craftsman, Dealer Service Dept., Ramsey, N. J. 07446.

CALIFORNIA, BERKELEY
PFM, Suydam, Gem, Max Gray, Austin, NWSL, etc. All Cal-Scale; Kemtron, Main Line, C.V. Ambroid, Books, "Fleischmann, Marklin"; Dremel and many other tools.
BERKELEY HARDWARE
2109 University Ave. TH 5-0410

Calif., Buena Park—Train & Hobby Shop, Knott's Berry Farm, JA 7-1468

CALIF. 91505, BURBANK
Complete HO & HOn3 sales & service. Closed Tues. Open Sun. 10-4, Fri. 9-9. We carry large supply of brass locos.

BEANIE'S HOBBY JUNCTION
850 N. Hollywood Way 848-1267

Cal., Campbell—Holmes Hobby Center
2381 Winchester Blvd., Ph: 378-4552

Calif., Cudahy — Robbies Hobby Center
7613 Atlantic Blvd. Ludlow 8-0305

CALIFORNIA, EL CERRITO
It's "UNIQUE" for HO TRAINS
Open daily 12-9 Sundays 12-6
UNIQUE MODEL CRAFT
10020 San Pablo Ave. LA 4-1314

Calif., Fremont—Hobbies Unlimited
41200C Blacow Rd. 657-6616

Calif., Fresno 3—Tom's Trains
2245 E. Hammond AM 6-3192

CALIFORNIA, LA PUENTE
Model Railroad Specialist. Try us for hard to get items and repair parts.
Open daily 10 to 6, Friday till 9.
CRAIN'S TRAINS & HOBBIES
1112 N. Hacienda Phone: 333-5502

Calif., Long Beach—Jiggs Hobby & Crafts.
938 South St., GA 2-2349

CALIFORNIA, LONG BEACH 13
Headquarters for your hobby. Complete stock of supplies for Model Railroads, Slot Racing and Ships. BOOKS!!
RAY'S HOBBY MODEL SUPPLIES
222 Long Beach Bl. Ph: HE 6-4054

Calif., Los Angeles — Allied Model Hobby Shop
0938 West Pico Blvd. GR 9-2228

CALIF., LOS ANGELES
Model, Hobby, Craft
"Simply Everything"
Open Daily — Closed Thursday
"COLONEL BOB'S"
7707 W. Pico RE 1-3717
7709 W. Pico RE 1-3717

CALIF., LOS ANGELES
Exclusively Model Railroad
All Gauges
Service
TROXEL BROS. MODELS
216 S. Western Ave. Los Angeles 4

Calif., North Hollywood—The Roundhouse.
5116 Lankershin Bl., 769-0403

CALIFORNIA 94947 NOVATO
Model Rails bring us your needs. Beginners Welcome — Any Age — Any Scale Operating Layout. Open Fri. till 9.

RANKIN'S HOBBYLAND
1425 Grant Ave. PCR-NMRA 892-6060

CALIFORNIA, OAKLAND 19
United—Tenshodo—Akane—Gem—
Max Gray HO exclusively
REED'S HOBBY SHOP
3129 High St. KE 4-1119

CALIFORNIA, OCEANSIDE
HO Model Railroad supplies. RTR & kits. We carry a complete line of parts in HO. Open 9-6. Fridays to 9 P.M.

ALAN'S BIKE & HOBBY SHOP
1732 So. Hill St. SA 2-6950

CALIFORNIA, PASADENA 8
HO, HOn3 Sales and Service
Kemtron-Cal-Scale-United-Tenshodo
We give S&H Green Stamps
WHISTLE STOP
3745 E. Colorado Bl. Sycamore 6-7791

CALIFORNIA, SACRAMENTO 14
Everything for the Model Railroader
Kits, Tools, Books
HOBBY CRAFTS
1616 Jay Street Phone 442-1293

Calif., San Bernardino — My Hobby Shop
24621 E. Baseline TUrner 9-1875

CALIF., SAN DIEGO
FRANK "THE TRAINMAN"
Lionel, American Flyer Service
Model Railroading Exclusively
4310 Park Blvd. CY 5-1611

Calif., 92105, San Diego — Gladys "Trains" Model Train Headquarters
4275 University Ave. Ph. 284-3449

Calif., San Diego—The Whistle Stop
3819 Sixth Avenue CY 5-7340

CALIFORNIA 91773, SAN DIMAS
Factory service, Lionel, Tyco, Aurora, Atlas. Complete Train repair service. Closed Monday.

ROY E. HOOPER LOCK & MODEL SHOP
211 W. Bonita Ave. LY 9-2602

CALIF., SAN FRANCISCO
Try Us.
FRANCISCAN HOBBIES
1935 Ocean Ave. JU 4-3919

CALIF., SAN FRANCISCO
Noriega Hobby Shop John's Trains
See us for trains, scale, tinplate
If it's good, we have it
3917 Noriega St. OV 1-7838

CALIF., SAN JOSE
Exclusively HO
Expert HO Repairing
9 to 6, Mon., Thurs.; Fri., 9 to 9
HUSTON'S HOBBY SHOP, INC.
335 S. First St. CY 4-6050

Cal., San Lorenzo—Hobbies Unlimited
17331 Hesperian Blvd. BR 8-1150

CALIF., SAN MATEO
California's most complete train store
Sales and service.
We give S & H Green Stamps
TRAINS—nothing but—TRAINS
138 W. 25th Ave 341-5846

CALIF., SUNNYVALE
The West's largest train store. Try us.
Lionel, A.F., Marklin, HO
Authorized service. 10 A.M.-9 P.M.
SAT. 10 A.M.-6 P.M., SUN. 12-6
THE ENGINE HOUSE
672 Alberta Ave. CH 5-0609

CALIF., VAN NUYS
The one-stop shop for model railroaders. Books, Traction, PFM, Gray, Kemtron, Cal-Scale. We service what we sell. Daily 10-6, Mon. Fri. till 9
CLINT'S HOBBYS
14831 Burbank Bl. Ph. STate 0-5533

Colorado, Colorado Springs—
Lemle's Roundhouse
2410 No. Nevada (Rear) 632-1969

COLORADO, DENVER
HO Our Specialty
Tenshodo, United, Kemtron, Cal-Scale
Unimat & Accessories
CABOOSE HOBBIES
610 - 15th St. TA 5-1742

Colorado, Denver—Model Hobby Shop
3018 W. 38th Ave. GRand 8121

Conn., Branford — Branford Hobbies
Boston Post Road HU 8-9865

Conn., Bridgeport—Irv Yuridin's Train and Hobby Center
313 Fairfield Ave. ED 5-4545

CONN., COLUMBIA
Authorized Service Station for Mantua, Tyco, Walthers, Roundhouse & Athearn Stock, Pacific Fast Mail Bldg & Car Kits.

COLUMBIA CENTRAL HOBBY SHOP
Rte. #6, RFD #1 Phone: 228-9072

TRAVELING THIS SUMMER?
These and hundreds of other year round hobby dealers are fun to visit in your travels.

CONN., HARTFORD 3
New England's most complete HO Kits, Parts, Ready-to-Run & Imports. Airplanes, Boats, Craft Supplies. Daily 9:00 to 5:30—Thurs. to 9:00.

HOBBY CENTER
222 Pearl St. Phone: 247-1482

Conn., New Haven—Hull's Hobbies, Inc.
1203 Chapel St. near Howe UN 5-4319

CONN., NEW MILFORD
O, HO kits, locos, parts, scale lumber, TRACTION — Kidder, Miller, MTS, Suydam, Wagner, TOOLS—Custom bldg. & pnts. Closed Thurs.
NEW MILFORD HOBBY SHOP
48 Kent Rd., U.S. Rt., 7
203 EL 4-4789

CONN., STRATFORD
Home of Baldwin Model Locos. O Ga. Authorized Lionel & Am. Flyer Service. All Gauges from TT to 1/4" Steam.

TRAIN EXCHANGE CENTER, INC.
3636 Main St. 378-5233

Fla., Melbourne—Ernie's Hobby Shop
308 New Haven Av. Phone PA 3-4610

CONN. 06492, WALLINGFORD
"O" Scale, HO, Tinplate, PFM, Kidder United, Max Gray, all lines Lionel Daily 10:30 AM-8 PM. Sat 'til 6.
SPORT & HOBBY CENTER
846 S. Colony 269-3019

FLORIDA, MIAMI
ORANGE BLOSSOM HOBBIES
HO — HOn3 — Traction — TT
See us for your modeling needs—from scratch-building thru R-T-R.
1975 NW 36th St. 633-2521

D. C., Washington 9 — Downtown Lock & Electric Co.
1314 14th St., N.W. 265-5990

FLORIDA, ORLANDO
Largest selection of HO, HOn3 in Fla. United, Tenshodo, Akane, North'stern, Ambroid, LaBelle, Walthers, Cal-Scale, Kemtron, Kadec, etc. Service, repairs.
COOPER'S HO DEPOT
2630 Edgewater Dr. 305-GA 5-8933

FLORIDA, TAMPA
THE MOST
CHESTER HOLLEY
3812-20 S. Himes Ave. 831-7202

Fla. 33406, West Palm Beach—
The Flagstop
1240-42 Pineway Dr. Phone 683-2632

GEORGIA 30030, DECATUR
HO Railroads, Model Planes, Model Car Racing. Open 11 AM - 11 PM
Metro Atlanta's FRIENDLY Hobby Shop
HOBBY HOUSE—DECATUR SPEEDWAY
130 E. Ponce de Leon 378-2253

ILLINOIS 60504, AURORA
Tenshodo, United, Suydam, N-W Shortline, Ken Kidder, Kemtron, Cal-Scale, Ambroid Kits, M. E. W. and many others. Daily 9-5:30, Mon. & Fri. to 8:30.

JOHN'S HOBBY SHOP
25 South River St. Ph: 312-896-0303

ILLINOIS, CHICAGO
Complete stock domestic & imported HO trains, equipment, parts & service. Std. Ga. parts, rewheeling & repairs.
BENTY HOBBY SUPPLIES
956 W. Belmont Ave. WE 5-9860

ILLINOIS, CHICAGO
Chicago's greatest stock of Model Trains in O-HO-TT-S gauges
Parts galore in SHIPS—PLANES
ALL NATION HOBBY SHOP
220 W. Madison St. Chicago 6

ILLINOIS 60601, CHICAGO
Downtown Hqtrs. for HO RR.
Lionel-Tyco-Sets-Track-Access.
Also complete Road Race & Slot Racing
K & G PRODUCTS CO.
119 W. Lake St. FI 6-3238

Ill. 60641, Chicago—M&G Hobby & Cycle Shop
3445 N. Pulaski Rd. 539-5310

Ill. 60647, Chicago—R & W Hobbies
2719 Milwaukee Ave. Ph: CO 7-4821

ILLINOIS 60651, CHICAGO
HO-HOn3-TT-On3-"000" Specialists
All Imports—Many unusual items
6-10 PM, Sat. 10-6 PM, Sun. 10-3
TRAINS, INC.
5710 1/2 W. Diversey Ave. 637-7781

ILLINOIS, CHICAGO
TT, O, S, HO railroads, race cars.
Complete stock of kits and supplies for boats, airplanes

TROST MODEL SHOP
3111 W. 63rd St. PROspect 6-1354

ILLINOIS BERWYN-CICERO 50
Complete Stock for Model Railroaders
Kits, Parts, Tools, Supplies. Lionel Approved Service and Sales Station.
AIRPLANE MODEL & HOBBY SHOP
6129 W. Cermak Rd. OL 6-0224

ILLINOIS, DES PLAINES
PFM, Akane, Gem, Cal-Scale, Others.
Complete Line Kits, Acc., Scratch Bldrs. Suppliers, R.T.R. Equip., etc.

THE TOY & HOBBY HOUSE
1486 Miner St. Phone: 827-5550

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

ILLINOIS 60202, EVANSTON
"Everything in Trains." Military Miniatures, Custom Building & Painting.

THE HOBBY CHEST, INC.
515 Howard St. DA 8-4811

Illinois, Galesburg—Ray's Hobby
181 N. Cherry St. (Telephone) 4630

Illinois, Joliet—Walt's Hobby and Model Shop
32 W. Clinton St. Phone 6-1632

Illinois, Park Ridge—Bill's Craft & Hobby Shop
30 Main St.

Illinois 61571, Washington—Larry's Hobby House
417 Wagner Pl. Rear Phone: 283-2271

DEALERS—
For full information on low cost Dealer Directory advertising, write to Railroad Model Craftsman, Dealer Service Dept., Ramsey, N. J. 07446.

Indiana, Mishawaka—Bob's Hobby Shop
713 N. Main St. BBlackburn 5-8111

INDIANA 47304, MUNCIE
Trains for model builder or collector. Parts, kits, tools, supplies, repairs. Lionel-Mantua-Tyco Serv. Sta. Buy-Sell-Trade. M-W-F 4-9; S 1-5.
LINES ELECTRIC SERVICE
5809 Taylor Rd. (317) 288-2277

Ind. 47274, Seymour—Spencer's Food and Hobby—2015 Ewing Street Rd.

Kansas 66604, Topeka—Peterson Elect. Appl. Service.
1234 Clay St. Phone CE 2-1854

LOUISIANA, NEW ORLEANS 25
Tenshodo, United, Gem, Cal-Scale, etc. Daily 9:00-6:00 for Your HO Kits, Tools, Books, Parts, Builders Supplies, etc.

HUB HOBBY SHOP
2618 So. Broad Ave. Phone: 822-3914

MARYLAND, BALTIMORE
Baltimore's complete hobby shop. Over 20,000 HO items. Lower Prices. Closed Wed. Daily 12-8:45. Sat. 10-5:45

CITY-WIDE HOBBY SHOP
7913 Harford Rd. NO 8-9200

Maryland, Baltimore 2—M. B. Klein,
206 N. Gay St., LE 9-6207

MARYLAND, BALTIMORE 18
The Complete Railroad Shop
All Gauges—And Parts
We Assemble We Spray Paint
LLOYD'S
Model Railroad Headquarters
2201 N. Charles Street

MARYLAND, SEVERNA PARK
Most complete hobby shop Chesapeake Bay area. All scales & gauges model trains, cars, boats.
"Frank, The Trainman" S. P. Shop Center

THE DEPOT
Box 800 301-MI 7-6602

Mass., Arlington—Bancroft Cycle & Hobby Shop
1377 Mass. Ave. MI 3-7878

MASS., BOSTON
HO-Hon3 Locomotives, Kits & Accessories
Most complete stock of HO-Hon3 in Boston—6 days 10 a.m. to 7:30 p.m.
EAST BOSTON HOBBY SHOP
32-34 Bennington Street
E. Boston 28, Mass.

MASS., BOSTON
Model Railroads Exclusively. Lionel-American Flyer-Marklin. Complete line of HO.
Home of Tremont 26 Switch
ERIC FUCHS
26 Tremont Street Boston

Mass. 02189, East Weymouth—
MacDonald Hobbycraft Co.
19 Fairmount Ave. Tel. 337-9185

MASS., LAWRENCE
This complete shop for the Model Builder. Open till 9 p.m. daily., Sat. till 6 p.m. HO Trains our specialty, plus Planes, Boats, Gas Engines, R/C equip.

MODELER'S HAVEN
80 Manchester St. Phone: 683-3222

MASS., LYNN
"New England's Foremost Hobby Shop" HO Trains—Model Motoring—Ships—Planes—Gas Engines—R/C Equip. Stamps & Coins for Collectors
LYNN HOBBY CENTER, INC.
18 City Hall Square LY 8-2382

MASS. 02346, MIDDLEBORO
Open Tues., Thurs., Fri. 7-10 P.M.
MODEL RAILWAY INTERCHANGE
15 Elm St. 947-3716

MASS., NORTH DARTMOUTH
Large Selection of HO Trains & Accessories. 1 PM to 10 PM Daily—10 AM to 6 PM Sat.

BILL DAYS-MODEL RAILROAD SERVICE
303 Slocum Rd.

Mass., North Easton—Lindstroms, 50 Elm St. CEDar 8-6224

Mass. 01608, Worcester—
HENRY'S HOBBY HOUSE
61 Pleasant St. Phone: 754-5604

Michigan, Battle Creek—Howard's Hobby Shop
33 Capital St., N. E. WO 8-8211

MICHIGAN, DEARBORN
All Gauges—Hon3, HO, On3, O Parts Kits, Tenshodo, United Kemtron. All Others. Open Thur. & Fri. 'til 9:00

STAR HOBBIES
22005 W. Outer Dr. Logan 5-9670

MICHIGAN, DETROIT
Complete line HO Scale Model. Lionel & AF-approved Service Station. Block north of Tuller Hotel. 9 to 5:30. Monday to 9.

DOWNTOWN TRAIN & CAMERA SHOP
122 W. Elizabeth St. WO 1-6932

Michigan, Detroit 21—Hobby Shop, Inc.
19924 Livernois DI 1-8872

MICHIGAN, DETROIT
Trains, Crafts, Models, Toys. Over 50,000 items. Over 500 locos. All gauges. Michigan's largest antique train collection. Open eve. Mon., Wed., Fri. until 9.

MODELS HOBBY SUPPLIES
22524 Woodward Ave. LI 3-2242

Michigan, Detroit—Northwest Detroit Hobby
18940 W. 7 Mile Rd. KE 3-6056

Michigan 48135, Garden City—Nankin Hardware
35101 Ford Rd. PA 2-5700

TRAVELING THIS SUMMER?
These and hundreds of other year round hobby dealers are fun to visit in your travels.

MICHIGAN, GRAND RAPIDS
Scale & Tinplate O - S - HO. Auth. Lionel - A.F. - Mantua - Tyco. Sales & Service

Daily 9:30-5:30 Mon. & Fri. 9:30-9
CARL A. MEYERS HOBBY HOUSE
227 S. Division Ave. GL 6-9395

Michigan, Kalamazoo—Hiler's Model Railroad Shop
712 Southworth 342-8248

MICH. 48915, LANSING
Parts, Kits, Trains, Inc. La Belle, Northeastern, Cary, Bowser, Kadec, Kemtron, Walthers, Hobbytown.
Open Sat. 9:30 a.m. to 7 p.m.
Other times by appointment.
JARCHOW'S HO REPAIRS
1511 Owen St. Rear IV 9-9223

MO. 64836, CARTHAGE—
Boomer Shack
1220 Oak St. FL 8-7421

MO. 64110, KANSAS CITY
Narrow Gauge Specialists and A complete line of HO
Daily 10 to 8:30 Sat. 9 to 5:30
K. C. HOBBY CENTER
5717 Troost Phone: JA 3-4596

MISSOURI 64131, KANSAS CITY
Model Railroad Headquarters
O-On3 - S - HO - Hon3 - 000
Lionel-American Flyer-Lost Wax Foundry

SPOTLIGHT RAILROAD
7427 Troost Ave. Phone: HI 4-7331

Missouri 63128, St. Louis—Charlie's Hobby House, Inc.
157 Concord Plaza FI 3-3836

Missouri, St. Louis 20—Henze's Hobby House
5405 Riverview CO 1-4480

MISSOURI, ST. LOUIS 18
Lionel parts for the home mechanic. Complete line of HO. American Flyer & Lionel.

JOHNSTON TRAIN SHOP
3118 Chippewa PR 2-8636

MISSOURI, ST. LOUIS 24
TINKER TOWN
Kits & parts for all gauges. Specialists in HO & TT. Also planes, boats & autos. Daily 9:30 to 5:30; Mon. & Fri. to 9:00.
9658 Clayton Rd. WY 1-0154

MISSOURI 63121, ST. LOUIS
Tenshodo-United-Ken Kidder-Max Gray Amer. Flyer-Lionel. Sales & Service
Mon.-Fri. 9:30-9, Sat. 9:30-6

TOM'S TRAINS, INC.
125 Normandy Shop. Ctr., EV 2-8220

REPAIRS?
Most of the hobby shops listed in these pages offer quality repair work at fair prices. Patronize the one nearest your home.

MONTANA, HUNGRY HORSE
Our New Location.
Complete stock of O, S, OO, HO, Hon3, TT, Amer. Flyer, Lionel.
EASTERN MODEL RAILROAD CO.
Contact us for location at P.O. Box 148

NEBRASKA, LINCOLN
HO-Hon3-000-Hon2 1/2. Nebraska's finest stock. Kits, locos, scratch parts
Daily 9:30-5:30. Thurs. 'til 8:30

CHICK BARTLETT'S HOBBY TOWN
134 No. 13th 432-3829

New Jersey, Elizabeth 3—Hobby Center
327 Morris ave. EL 2-1622

NEW JERSEY 07730, HAZLET
PFM, United, Tenshodo, Gem, Max Gray, Snydam Interurbans, Kemtron, Cal-Scale, Walthers, La Belle, HO Specialists.

INSTANT SPEEDWAY HOBBY CENTER
Airport Plaza Sh. Ctr. Highway 36

N. J. 07960, MORRISTOWN
The finest in domestic and imported model railroading. "From Spikes—to a Model Railroad Empire"

JOHNNY'S FAMILY HOBBY CENTER, INC.
151 South St. Phone: 267-9526

NEW JERSEY, PARSIPPANY
Authorized Service All Makes "O," "S," "HO" Trains. Open Sundays, Weekdays, evenings till 9 p.m.

RICH'S HOBBYTOWNE, INC.
Phonics: DE 4-2666, CA 6-7909
U. S. Highway 46

New Jersey, Plainfield—Craftsman Model Shop
300 Park Ave. Tel. PL 6-6089

NEW JERSEY, RAMSEY
TT, HO, S, O Scale. Cal-Scale, Kemtron Fittings, Auth. serv. Lionel, AF, PennLine, Tyco, Marklin, daily 10 to 8, Fri. 10 to 10, Sun. 10 to 6.)

HL-WAY HOBBY HOUSE
Route 17 DA 7-0075

New Jersey, Red Bank—Hobby Headquarters
62 White St. Red Bank 6-4451

NEW JERSEY, EAST RUTHERFORD
Rutherford's leading R.R. Headquarters HO, S, O gauges, Lionel, Gilbert, Parts, Gargraves track.

PAUL'S HOBBY SHOP
540 Paterson Ave. GE 8-0192

New Jersey, South Orange—Village Hobby Shop
14 Sloan Street SO 2-6939

NEW JERSEY, TOMS RIVER
HO, S, O—Cal Scale, PFM, Tenshodo, Tyco, Penn Line. Daily 10-9, Sun. 10-6.

HOBBY CITY
Route #37 341-1991

NEW JERSEY, TRENTON
25 years of Model Railroading. Paradise for Hobbyists! Collector items, too.

TRENTON HOBBY CENTRE
Daily 10-5:30, Thurs. till 9.
237 E. State St. EX 3-1644

NEW JERSEY, WESTMONT
Largest stock of quality HO, featuring Tenshodo, United, Max Gray, Gem, Hobbytown, Cal-Scale, Kemtron, Walthers. Scratch builders supplies.

SATTLER'S
14 Haddon Ave. 854-7136

ALBUQUERQUE, NEW MEXICO
O, HO Standard Narrow Gauge Brass Imports & Dom. Parts & Supplies. Planes-slot cars-science. Open eve. & Sun.

HOBBY KORNER
6693 - 4th NW (US85N) 344-3267

NEW YORK, BATAVIA
HO - Trains Specialist. Tenshodo L.M.B. - Mantua - Athearn. Open 1 p.m. to 9 p.m., except Wed., Sun., holidays.

BUDDY'S ROUNDHOUSE
10 Main St. FI 2-8241

NEW YORK 13905, BINGHAMTON
HO - United - Tenshodo - Lionel - Hobby Kits - Sales & Service
Slot Racing. Large 200' Track

KERN'S HOBBIES
7 Main St. 607-722-7507

NEW YORK 10465, BRONX
Hdgs. for Model Trains. All Gauges. Slot Racing, Arts, Crafts, Bike Acc. Archery, Science-Chem. Model Repairs
THROGS NECK HOBBY CENTER, Inc., 3482 E. Tremont Ave., 824-7072

NEW YORK, BUFFALO 14215
For the best in HO (Tenshodo, Akane, Max Gray, Ken Kidder, Tyco, Athearn, Cal-Scale, Kemtron, Selley.) Mon., Thur., Fri. 10-9; Tues. & Sat. 10-6. Closed Wednesday.

FIELD'S HOBBY CENTER
3177 Bailey Ave. TF 6-7833

NEW YORK, BUFFALO
Buffalo's original and most complete Hobby Shop. Open daily 9:30 to 5:30; Thurs. & Fri. 'til 9 p.m.

HOWARD E. RUTH HOBBIES
1466 Genesee St. TX 6-6850

N. Y. 14052, EAST AURORA
HO—Exclusively

KAR-LINE MODEL RAILROAD PRODUCTS CO.
274 Perry St. NL 2-8666

N.Y. 11518, EAST ROCKAWAY
Exclusive Model Railroading Wholesale — Retail

QUEENS MODEL RAILROAD SUPPLIES
1. E. Fulton St. LY 9-0277 LO 1-7576

New York 14871, Elmira (Pine City)
C. E. Farmer HO Supplies and Service, 963 Sebring Ave. RE 2-6672

NEW YORK, FRANKLIN SQUARE
All kinds of repairs—Lionel, Amer. Flyer, etc. Kits & parts — Tenshodo, United, Gem, LaBelle. Open Mon. & Fri. Eve.
FRANKLIN HOBBY SHOP
81 Franklin Ave. 516-FL 4-4470

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

RAILROAD MODEL CRAFTSMAN RECOMMENDED HOBBY DEALERS

DEALERS, WRITE RAILROAD MODEL CRAFTSMAN, RAMSEY, N. J. 07446, FOR FULL INFORMATION

New York, Freeport—Nassau Hobby Center
35 Church Street.

NEW YORK, HUNTINGTON
Model Railroad Specialists. Tremendous Stock of Parts—Try us! Largest Marklin Display on L. I.
THE CABOOSE-HUNTINGTON TRAIN CENTER
219 Wall St. at S'thdown HA 7-8288

NEW YORK 14850, ITHACA
Imports & domestic kits, parts, tools, supplies, repairs, custom building, painting, weathering, service.
KEYSTONE LOCOMOTIVE WORKS
1200 Warren Rd. Open eves. till 10

NEW YORK, NEW YORK
HO, Lionel, A.F., Marklin, Sales & Ser. Radio Control Equip. Planes, Boats, Crafts. Daily 9 to 9; Sun. & holidays 11 to 7.

HOBBY MART
Port Auth. Bus Term. (heart of NYC)
625—8th Ave. BR 9-5869

N. Y. 10036, NEW YORK
30,000 Items in All Gauges—World's Largest Train Store—We Buy, Sell, Trade Old Trains—Service All Makes
MODEL RAILROAD EQUIPMENT CORP.
23 W. 45 Street JU 2-2760-1-2

NEW YORK, NEW YORK
Trains from the world over! Accessories, parts and repairs, all gauges. World's leading hobby house, 5 fl's.
POLK'S HOBBY DEPT. STORE
314 5th Ave. at 32nd St. BR 9-9035

N. Y. 11419, RICHMOND HILL
United, Tenshodo, Gem, Max Gray. Largest Selection in New York. Cal-Scale parts.
TIP TOP HOBBY SHOP
111-11 Liberty Ave.
835-0963 or 641-9428

New York, Ridgewood—Nagengast Hardware
6802 Fresh Pond Rd.

New York, Rochester—Carl's Hobby House
1310 Clinton Ave., N CO 6-4706

NEW YORK, ROCHESTER
SCALE—Tinplate, Lionel Factory & American Flyer, Approved Service. Mfrs. of Gargraves Trackage. Exclusively model railroading equipment.
"TRAIN DOCTOR" GARDNER
2261 Dewey Ave. UN 5-6574

New York, Syracuse—Model Railroad & Hobby Center
219 E Fayette St. GR 1-2000

NORTH CAROLINA 27609, RALEIGH
Complete Stock for Model Railroaders Kits, tools, supplies, R/C equipment Model planes & boats
NORTH HILLS HOBBY SHOP
4257 Six Forks Rd. 919-787-2364

OHIO, CINCINNATI (WESTWOOD)
Exclusively Model Railroading Daily 7-9 p.m.
Saturdays 10 a.m. - 6 p.m.
THE MODEL RAILROAD SHOP
2953 Montana Ave. 513-661-9444 (Just off Harrison Ave., U.S. 52)

Ohio, Cleveland—Red's Hobbycraft
7804 St. Clair Ave. HE 1-0719

OHIO, CLEVELAND
HO Trains Exclusively
You must be satisfied or your money cheerfully refunded.
BARON'S HOBBY SHOP
898 E. 222nd St. RE 1-7775

OHIO, CLEVELAND
Complete HO stock, domestic & foreign, Slot Racing, Airplanes, Boats, radio control, motors, supplies, crafts.

NATIONAL HOBBY, INC.
4526 Lorain Ave. AT 1-3600
5238 Ridge Rd. (Parma) SH 9-4750

OHIO, CLEVELAND
Ready-to-Run HO, Lionel - Flyer. Available parts always in stock. Rare Lionel items; sales-service. TRADING OUR SPECIALTY.

TRADING POST
4384 Pearl Rd. ON 1-7300
Ohio 44116, Cleveland (Rocky River)
"Ho" R. R. & Trolley Supply Co.
19335 Laurel Ave. 333-3031

OHIO 43215, COLUMBUS
HO train & race sets. Tenshodo, United, Tyco, Gem, Cal-Scale, Kemtron, Brass & wood shapes. Airplanes, Plexiglas. Daily to 5:30. Mon. and Thursday to 9 P.M.

FRANK P. HALL, INC.
185 S. High St. 224-2188

OHIO, COLUMBUS 4
HO our Specialty - Working Layout - Model Planes, Car, Ships - Crafts and Science - Greeting Cards - Party and Gift Wrap Papers.

STRETE HOBBIES
3655 Sullivant Ave. BR 9-6959

OHIO, COLUMBUS
HO Kits, sets, ready to run, parts, service, operating layouts.
Mon.-Fri. 12-9; Sat. 10-9

HOBBYLAND
Graceland Shopping Ctr. 263-8500
Great Eastern Shop'g Ctr. 866-8500
Amos Shopping Center 267-8500

Ohio, Lakewood—Wings Hobby Shop, Inc.
17114 Detroit Ave. AC 1-0926

Ohio 45042, Middletown — Danny's Train Repair
208 Belmont St. 423-2040

Pa., Allentown—Bloch's Hobby
918 Hamilton St. HE 2-9975

PA., ALLENTOWN (Fogelsville)
Largest stock HO in area. Operating layout, R/C boats & planes, Indian lore. Acres of parking. Daily 10-10 and Sundays 1-10.

DON MOHR'S HOBBYLAND
6 Miles West on Rt. 22 EX 5-2842

PENNA. 16601, ALTOONA HERBY'S HOBBY SHOP
1435 11th Ave. 944-8834

PA., GLENSIDE
One Of America's Most Complete Stocks Of HO Cars, Locomotives & Accessories. Open to 11:00 PM Daily
FUN TYME HOBBY CENTERS, INC.
123 S. Easton Rd. TU 5-3030

PENNSYLVANIA, GREENSBURG
24 Hr. guaranteed repairs — All gauges of Trains — Sales & Service Authorized by all major companies.

COLLIER TRAIN SERVICE
203 W. Pittsburg St. TE 4-9504

Pa. 17740, Jersey Shore— "The Caboose"
R. D. 1 398-0702

Pa. 18704, Kingston— Jack's Hobby Center
Narrows Shopping Ctr. 287-1397

PA., LEBANON
Complete HO gauge Model Railroad Shop. We repair, custom build, service, trade, Tenshodo, Gem, Akane, LMB, KTM. Open evenings.

HOBBY HOUSE
1300 Florence St. CR 3-5461

PA. 7, PHILADELPHIA
Marklin, Fleischmann, Lionel and AF Complete line HO kits, accessories. Authorized Serv. Station for all trains

NICHOLAS SMITH
60 North 11 St. WA 5-0521

Pa., Philadelphia—Richard Francis Hobbies
5815 Woodland Ave. SA 9-1266

PA. 19102, PHILADELPHIA
PFM-GEM-Kidder-LMB-Hobbytown-Red Ball-Bowser-CV-Walthers. Skillful Repairs, Model Builders Suppliers—Lettering.

TOM THUMB HOBBY SHOPS
122 S. 16th St. LO 7-7194

PA., SOUTHAMPTON
HO Sets and Kits. Accessories: AF; Rokal Mantua-Tyco Authorized Service Station

BROADBENTS
44 Second St. Pike EL 7-0446

Pennsylvania, Sunbury—Schraeder's Corner Store
472 N. 4th Street AT 6-6841

PA., UPPER DARBY TODD'S FOR TRAINS
Largest, most complete "HO" & "O" Train & Traction Stock in Phila. area. 25 yrs. Train Sales & Service. Cust. Wk. Scratch Bldrs. Supplies.
7036 Terminal Sq. FL 2-1011

PA., Williamsport (Montoursville)
Model Railroads Only. We buy, sell and trade. Open 6 days a week from 9 to 9.
ENGLISH'S MODEL RAILROAD SUPPLY
21 Howard St. E/S Montour Sh. Pl. 368-2516

SO. DAKOTA 57104, SIOUX FALLS
Authorized sales and service in HO, S, and O Scales. Everything in Model Railroading from Tinplate to Custom Lettering and Painting.

THE INLAND EMPIRE SYSTEM
803 S. Duluth Ave. 334-8603

Tennessee, Nashville—Meacham Variety Store
2412 Gallatin Rd. Phone: 262-9636

TEXAS, DALLAS
Trains—Imports—Kits—Ready to Run—Acc.—Planes—Race Cars—Games—Crafts. Service on anything we sell.
BOBBY HALL'S HOBBY HOUSE
4822 Bryan St. TA 1-2550

TEXAS 78201, SAN ANTONIO
Branch Line Train Center, 2111-A Blanco Rd.

TEXAS 78212, SAN ANTONIO
See our 300' HO Model Railroad and the Construction of our 1½ Scale Live Steam Railroad.

CES & RONNIE'S HOBBYLAND
1420 N. McCullough PE 4-5952

TEXAS, SAN ANTONIO
Operated by a modeler for model builders. Terrell Plaza Center on U.S. 81. Open Thursday evenings.

DICK'S HOBBY SHOP
113 Plaza Gordon TA 6-7941

VIRGINIA, ARLINGTON
HO, S, O scale kits, layout supplies, parts, tools, Lionel, Amer. Flyer.
Hours: 10:30-7.
Mon., Thurs., Fri. to 9

ARLINGTON HOBBY CRAFTERS
625 N. Glebe Rd. JA 2-6442

Va. 23503, Norfolk—Ocean View Hobby Shop
404 E. Ocean View Ave. JU 7-5374

Va. 23504, Norfolk—Toy Craft
3904 Granby St. Madison 2-6043

Va. 23505, Norfolk—Zephyr Miniatures
Wards Corner
123 W. Little Creek Rd. JU 8-1934

Va., Richmond—Bob's Hobby Center
3002 W. Cary St. Phone: 353-6566

WASHINGTON, SEATTLE
Complete line of Trains - Airplanes - Ships - Racecars - Supplies

HOBBY CRAFT
The Bon Marche MA 4-1234

WASHINGTON, SEATTLE 66
Complete line HO kits, accessories, tools. Import locos PFM, Gray, Austin, Akane, NWSL. Open daily 10-6, except Mon. & Fri. 10-9 p.m.

BURIEN HOBBY CENTER
619 S.W. 152nd St. CH 2-8410

WASHINGTON, SPOKANE 10
HO Model Trains
Airplanes, Boats, Kits and Supplies
Open Friday Evenings
MAURIE'S MODEL SHOP
Bon Marche, Main & Howard
RI 7-5111

WISCONSIN, MILWAUKEE
Complete stock of Walthers O & HO kits, parts and decals. Monday to Friday 8 to 4:30.

TERMINAL HOBBY SHOP
1247 N Water St. Broad'y 1-7364

WISCONSIN, MILWAUKEE
HO Specialist Tenshodo, Gem, Cal-Scale, Kemtron, United, 99% Complete One Stop Shop for all hobbies.

HOBBY HORSE
Capitol Ct. Shopping Ctr., UP 1-9730

Wisconsin, West Allis 14—Garman's Hobby Shop
8216 N. National Ave. GR 6-1412

ONTARIO, LONDON
Live Steam Rail 1" and 1½" Scale
All Canadian Alv-Aloy
Accessories for Cars, etc.
DUNDAS HOBBY SHOP
804 Dundas St. Phone: 438-3975

ONTARIO, ST. CATHARINES— NIAGARA CENTRAL HOBBIES
236 St. Paul Street 684-7355

Ontario, Toronto, 17—Leonard's Hobby Centre
1586 Bayview Ave. Phone: 483-8825

ONTARIO, TORONTO 12
Athearn, Mantua, Hornby, Rivarossi, Tenshodo, etc. Authorized Train Repairs. Mon. to Sat. 9-6; Thur. & Fri. to 9 p.m.

NORTH YORK HOBBIES & CRAFTS
1910 Avenue Road RU 1-4139

Ontario, Windsor—Janisse's Hobby & Toy Shop
2017 Wyandotte St., W CI 2-8817

ONTARIO, TORONTO 7
Canada's only exclusive train store. New, used and rebuilt trains. Guaranteed repairs.

GEORGE'S TRAINS
510 Mt. Pleasant Road
Phone: 489-9783

ONTARIO, TORONTO 12
Canada's HO Gauge Specialists
Always First with the Newest
We Service What We Sell
THE MODEL TRAIN SHOP
2387 Yonge St. 483-0967

If your local dealer does not stock copies of Railroad Model Craftsman each month or if he continually runs out before you obtain your copy, send us his name and address. We'll make sure he receives a complete supply of Railroad Model Craftsman magazines each month, just as soon as they are issued. Put the name and address of your dealer on a post card and send to:

Circulation Department, Railroad Model Craftsman, Ramsey, New Jersey 07446

FOR THE BEST IN YEAR ROUND SERVICE, SUPPLIES AND TRAIN REPAIRS

Subscribe Today

ENJOY MODEL RAILROADING 12 MONTHS OF THE YEAR

A subscription brings **RAILROAD MODEL CRAFTSMAN** right to your mailbox every month mailed flat in a rainproof sealed poly-bag, perfect protection against dog ears and torn covers. (Foreign copies in envelopes at present.)

RAILROAD MODEL CRAFTSMAN is filled with everything you want to know about model railroading. Recent issues have contained construction articles on styrene scenery, four car rectified trolley operation, modern engine terminals, locomotive conversion and detailing, and much more.

And there have been plans for camelbacks, Jersey Central suburban tank locos, low hood diesels by Alco, GE, and Electro-Motive, plus many older designs by Baldwin, Lima-Hamilton, Fairbanks-Morse, and the big makers. There have also been plans for the new big freight cars and there are more coming.

In addition, each issue of RMC contains picture stories of top model railroad layouts, models, plus special departments and reviews of new model railroad products.

You'll be glad you sent your check or money order in today for your three, two, or one year subscription to the pioneer model railroad magazine.



Advertising Index for November 1966 Issue

A

Alexander, Edwin P.	54
All Nation Hobby Line	11
America's Hobby Center	8, 9
Amron Products Company	60
Associated Hobby Manufacturers	34, 35
Athearn, Inc.	3
Atlantic Scale Models	58
Atlas Tool Co.	11
Austin, M. B.	62

B

Balboa Scale Models	58
Baldwin Model Locomotive Works	62
Benty Hobby Supplies	54
Black, Edward	61
Bowser Manufacturing Co.	7
Boyd, A. B., Co.	10

C

Cal-Scale	5
Campbell Scale Models	12
Central Valley	62
Champion Decal Co.	5
Cliff Line	62
Colonial Craft Reproductions, Inc.	54

F

Floquil Products, Inc.	58
------------------------	----

G

Gardner "The Train Doctor"	53
----------------------------	----

H

Hobby House, Inc.	2
Huntingdon Model Works	59

K

Kadee Metal Products Co.	58
--------------------------	----

L

Lee's Hobby	60
LMB Models	18

M

Main Line Models	5
Mil-Scale Products	54
Model Craftsman Pub. Corp.	51, 57, 59, 67
Model Die Casting Co.	7
Model Engineering Works	54
Model Railroad Products	60
Model Tramway System	12

N

Northeastern Scale Models	61
---------------------------	----

P

Pacific Fast Mail	68
Permacraft Products	61
Pittman Corporation	55
Polk's Hobbycraft	14, 15
Preston, Nathan R., & Co.	13

R

Railroad Model Craftsman	49, 66
Real-Like	54
Red Ball—Howell Day	6
Replica Mail Specialists	57, 59
Roundhouse	61

S

S Gauge Herald, Inc.	60
Sattler's HO Depot	59
Scale Railway Equipment Co.	53
Schopp, William	59
Selley Incorporated	60
Smith, Nicholas	53
Southwest Railroad Historical Soc.	58
Special Shapes Company	6
Stauffer Alvin F.	57

T

Thorley Hoople Toy Co.	53
Trackside Specialties	7
Tri-Delt Sophisticated Electronics	6
Tru-Scale Models	5

U

Ulrich, C. J., Co.	6
--------------------	---

V

Vicart Products	57
-----------------	----

W

Walthers, Wm. K., Inc.	10, 12, 54
Western Model Distributors	62
Westwood	10

SUBSCRIBER SERVICE

3066

Mail to: Miss Elizabeth Dickson, Circulation Manager, Railroad Model Craftsman, 6 East Main St., Ramsey, N. J. 07446.

Please include your RMC address label to insure prompt service whenever you write about your subscription.

To subscribe: mail this form with your payment, and check ☐ new subscription ☐ renew my present subscription.

Subscription rates in U.S.A. and Canada: 1 Year, \$5.00; 2 years, \$9.00; 3 years, \$12.00. Add \$1.00 per year for all other countries.

If you don't want to mutilate magazine, send your order and remittance in a letter.

FOR CHANGE OF ADDRESS

ATTACH
LABEL
HERE

If you're moving, please let us know six weeks before changing your address. Place RMC address label here, print your new address below. Be sure to include Zip Code. Canadians give city Zone No., if any

name

street

city

state

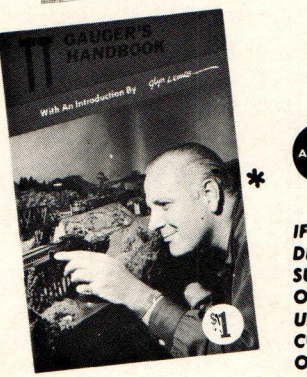
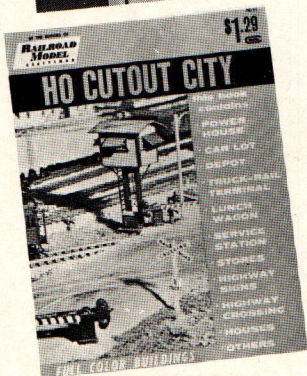
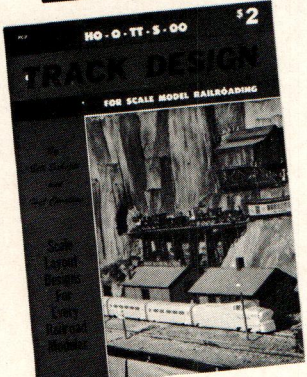
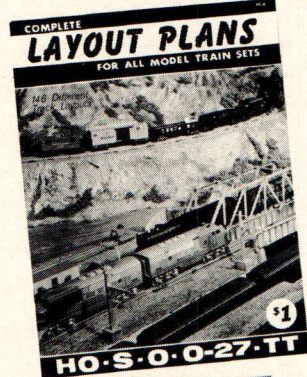
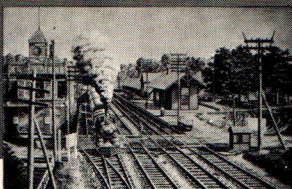
zip

Please print or type legibly

Do not write in this box

R

Your Hobby Dealer Has Carstens Hobby Books



NEW RAILROAD ATLAS—RMC EDITION\$3.95

Latest 1965 version of famous Rand-McNally Railroad Atlas, in a special Railroad Model Craftsman edition now listing all fifty states and latest railroad mergers. Contains special tables giving miles of track operated. Excellent for modelers and railroad enthusiasts.

TRACTION PLANBOOK & ALBUM.....\$2.00

A cyclopedia of 62 different traction plans from the oldest single trucker to the latest in PCC and rapid transit types. Over 80 photos. Acclaimed by trolley fans everywhere as a must book.

ROLLING STOCK PLAN BOOK.....\$2.00

New revised edition with more plans, 119 different freight, passenger, and non-revenue cars in all. Also 68 prototype car photos. A book for scratch builders, detail artists, and railfans.

LIONEL STANDARD GAUGE ERA.....\$2.00

Photos and text describing almost every major loco and car type made by Lionel in Standard Gauge from 1906 to 1941. Invaluable reference for collectors, armchair buffs, and dealers.

TRACK DESIGN.....\$2.00

Scale layout designs to fit any space from 12 to 2700 feet. The best of the Layout Doctor's designs. Primarily for modelers who like to lay their own track but loaded with data for all railroaders. Covers all types of layouts: branches to super main lines.

COMPLETE LAYOUT PLANS.....\$1.00

A trackbook for those who prefer sectional track, whether in OOO, TT, HO, O-27, O or Super-O. 146 track designs to fit every budget, space, or desire. Many shown in color complete with scenic suggestions. Special introductory chapter covering special problems.

HO CUTOUT CITY.....\$1.29

Latest printing of the famous RMC cutout books. Contains full color cutouts for making a complete HO city with stores, gas-station, rail-truck depot, crossing gates, power house, over 100 different highway signs, etc. Printed on heavy card, one side only. Also suitable for use with HO motoring sets.

NYO&W EMPLOYEE TIMETABLE NO. 44, JUNE 1898.....\$2.00

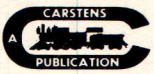
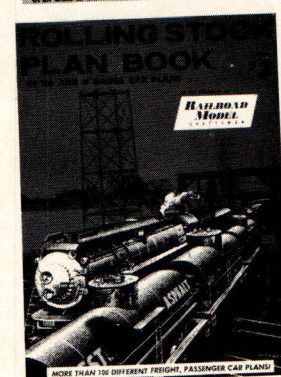
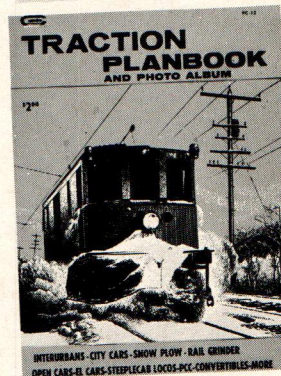
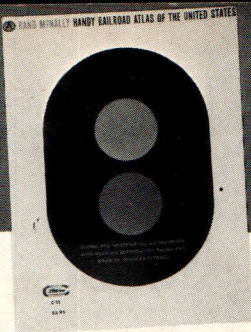
Authentic 16 page reproduction of rare 1898 NYO&W employee timetable No. 44, effective June 26, 1898. Measures over 8x14". Lists Chicago Express, milk and freight trains. Ideal for framing. A must for collectors, railfans, modelers, historians.

TT GAUGERS HANDBOOK.....\$1.00

Every TT gauger needs this book. Glyn Lewis tells how he built his Hudson & Mohawk RR in 1/10 scale. Also plans for locos, cars, structures, trestles.

RAMSEY — 1905.....\$1.50

Gorgeous full color lithograph print of Don Wallworth's painting showing the Erie depot at Ramsey, N. J. as it was in 1905. Mailed in protective tube, printed one side of sheet only. 11" x 16"



IF YOUR LOCAL
DEALER CAN'T
SUPPLY YOU,
ORDER DIRECT
USING THIS
CONVENIENT
ORDER BLANK

MODEL CRAFTSMAN PUBLISHING CORP.
P. O. Drawer C
Ramsey, New Jersey 07446

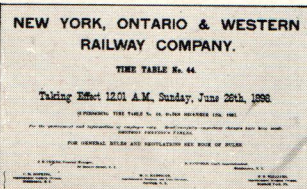
Dept. 4055

My dealer can't supply me. Please send the colorful Carstens Hobby Books I have checked below. I enclose \$..... in check or money order. I understand that if I am not completely satisfied I can return any of the books within 5 days for full credit.

- ☐ Rolling Stock Plan Book, \$2.00
- ☐ Track Design, \$2.00
- ☐ Complete Layout Plans, \$1.00
- ☐ TT Gaugers Handbook, \$1.00
- ☐ Ramsey-1905 Print, \$1.50

- ☐ Traction Plan Book, \$2.00
- ☐ HO Scale Cutouts, \$1.29
- ☐ Lionel Standard Gauge Era, \$2.00
- ☐ 1898 NYO&W Time Table, \$2.00
- ☐ RMC Handy Railroad Atlas, \$3.95

Name.....
Street.....
City..... State..... Zip.....



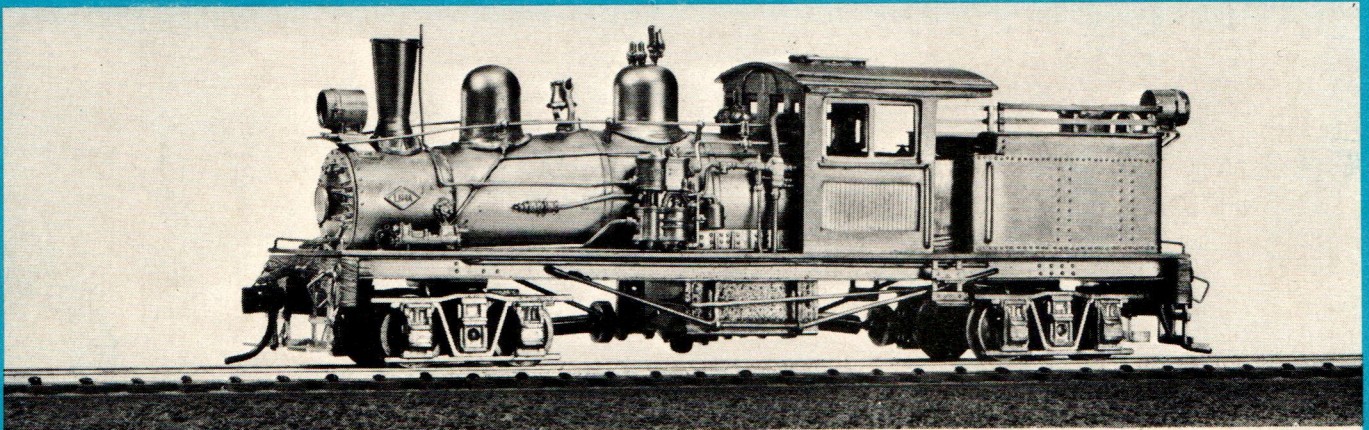
THE BIG PROBLEM

A Michigan logger, true enough, but Ephraim Shay was no mere 'boomer' nor 'river pig.' School teacher, engineer, musician, doctor and entrepreneur—he was all of these, and finally of course he was the designer of the locomotives which carried his name . . .

To stay alive in the logging business through the Michigan winters of the 1870's Shay had to figure how to deliver his logs at low cost over cheap wooden rails through mud and snow on dependable delivery schedules. As he said, "The big problem in logging was, and still is, how to get the logs out of the woods."

Well, for today's HO Scale Modeler it's still a thorny problem. But solvable. United has carried on where Shay and Lima left off in the prototype world. Both the 2-Truck and the 3-Truck Shays offered by United will soon be again available from your nearest friendly PFM Dealer . . .

. . . for your winter logging needs.



ABOVE: United's "B-2" Shay

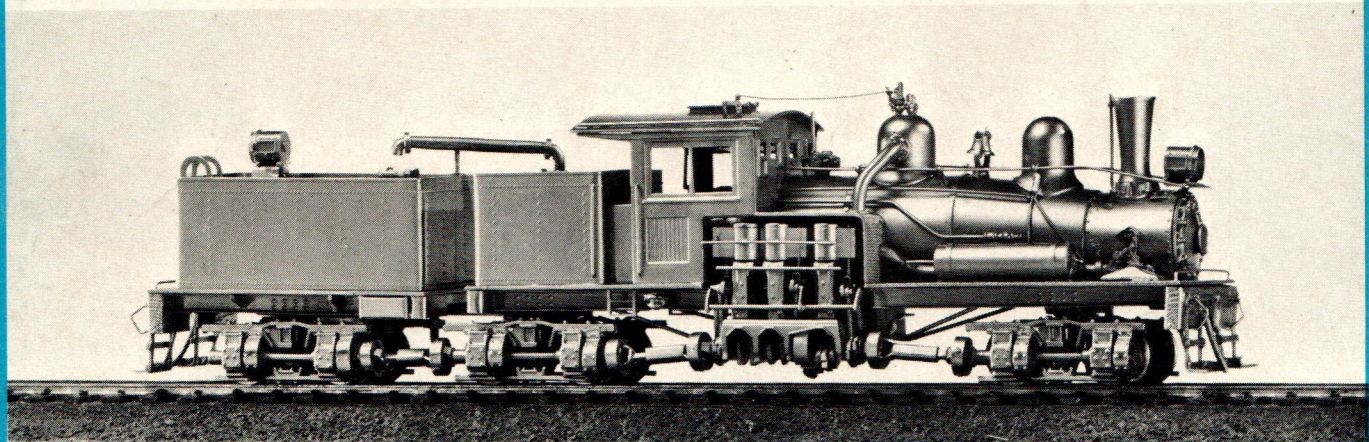
Minimum Radius 15"

Price, in the U.S.A. \$54.95

BELOW: United's "B-3" Shay

Minimum Radius 15"

Price, in the U.S.A. \$59.95



In the USA
P.O. Box 57
Edmonds, Washington 98020

PACIFIC FAST MAIL

In Canada
5816 Cambie
Vancouver 15, B.C.